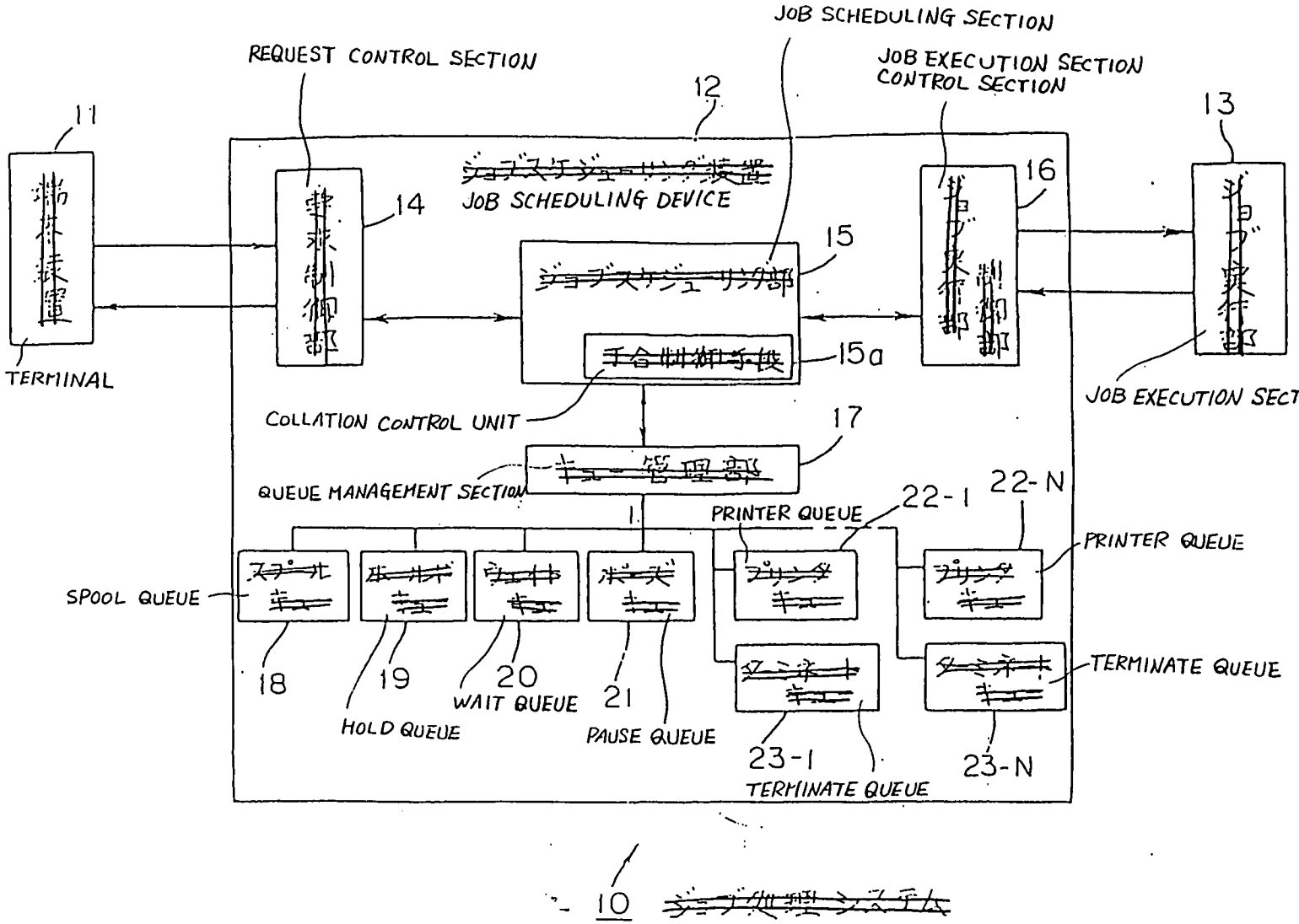
BSDOCID: [illegible]

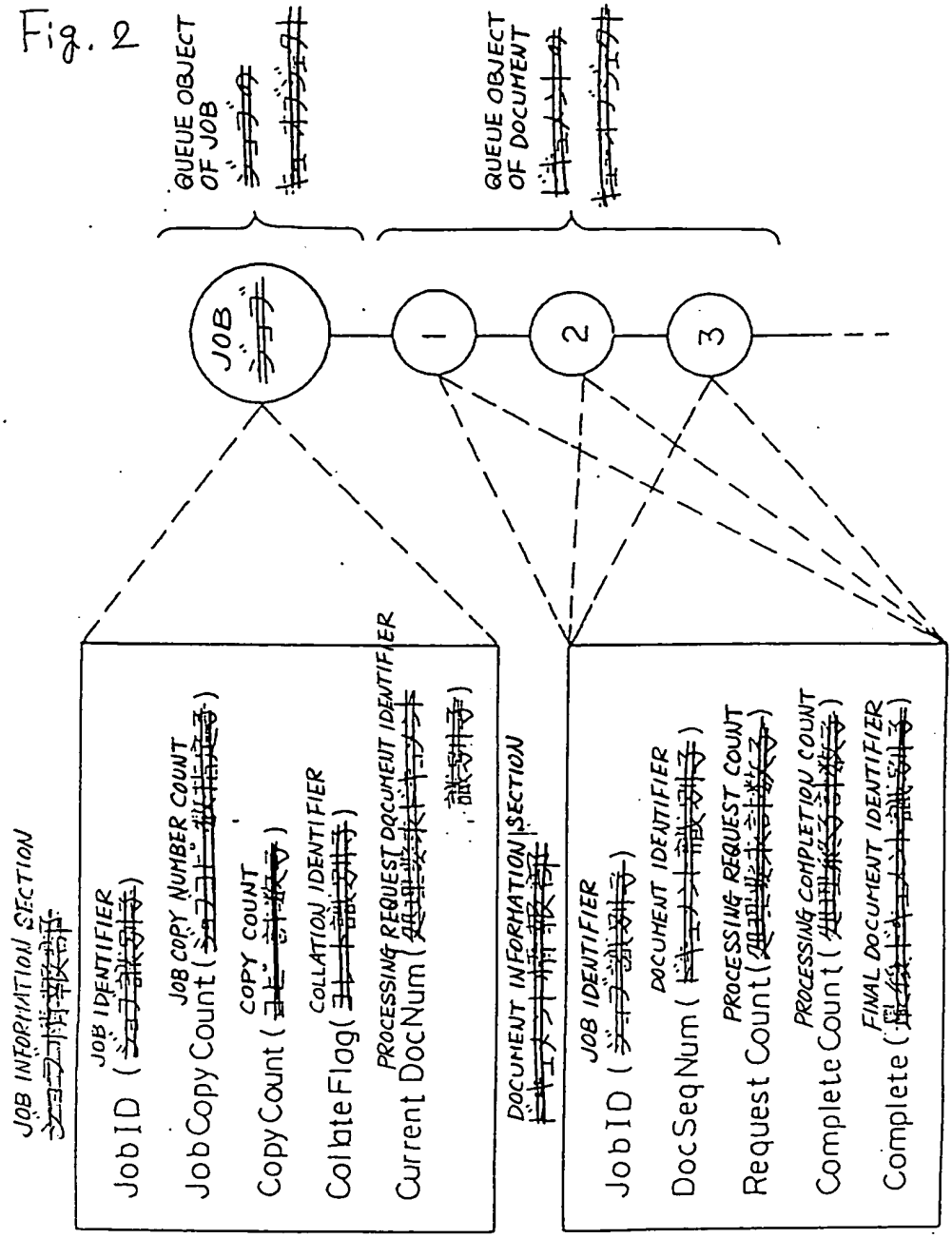


第1図 Fig. 1

特願平5-000081(図面) スキャン 1/9

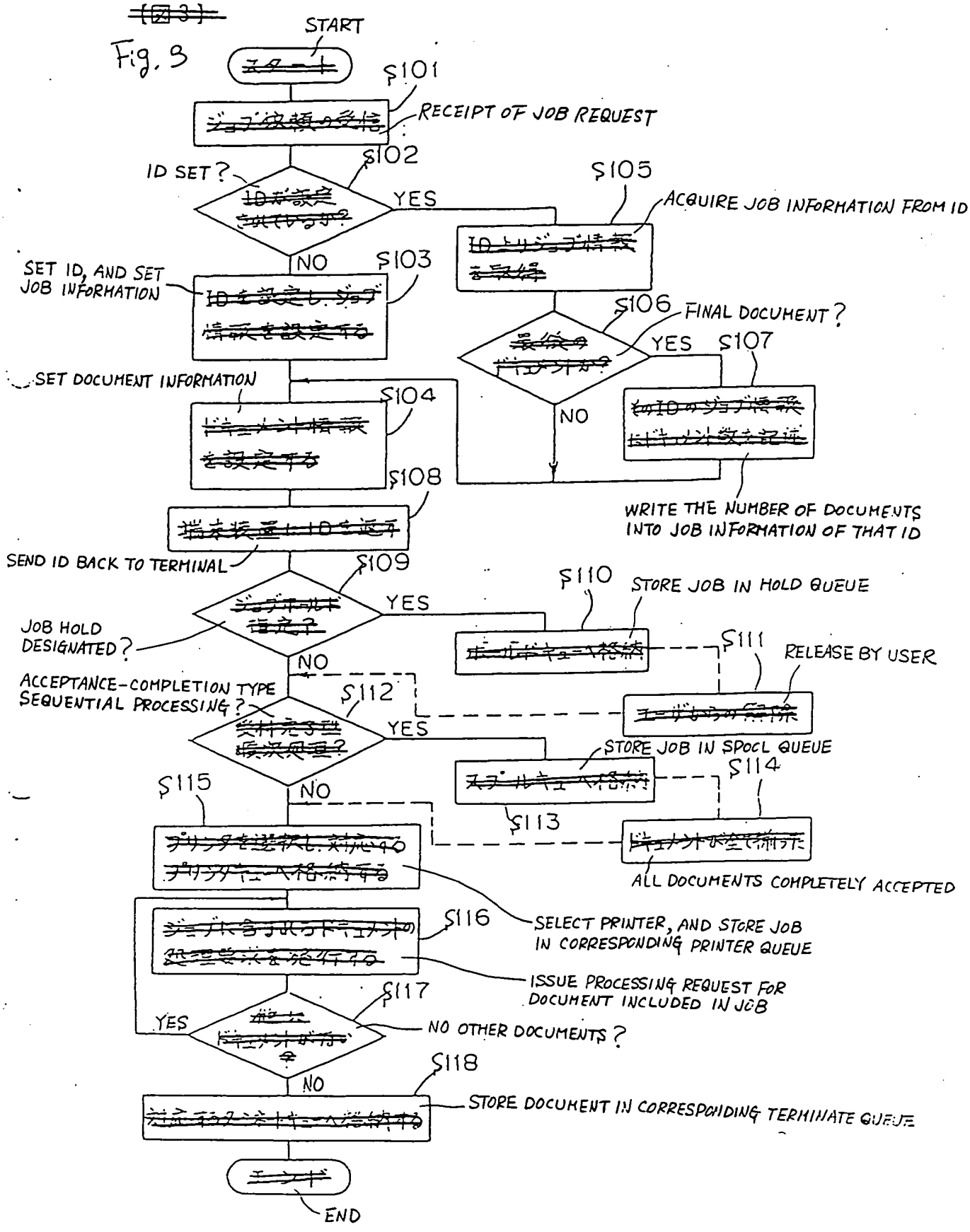
(図2)

Fig. 2


QUEUE OBJECT OF JOB
QUEUE OBJECT OF DOCUMENT
JOB
1
2
3
JOB INFORMATION SECTION
JOB IDENTIFIER
JobID
JOB COPY NUMBER COUNT
JobCopyCount
COPY COUNT
CopyCount
COLLATION IDENTIFIER
CollateFlag
PROCESSING REQUEST DOCUMENT IDENTIFIER
CurrentDocNum
DOCUMENT INFORMATION SECTION
JOB IDENTIFIER
JobID
DOCUMENT IDENTIFIER
DocSeqNum
PROCESSING REQUEST COUNT
RequestCount
PROCESSING COMPLETION COUNT
CompleteCount
FINAL DOCUMENT IDENTIFIER
Complete

(図3)

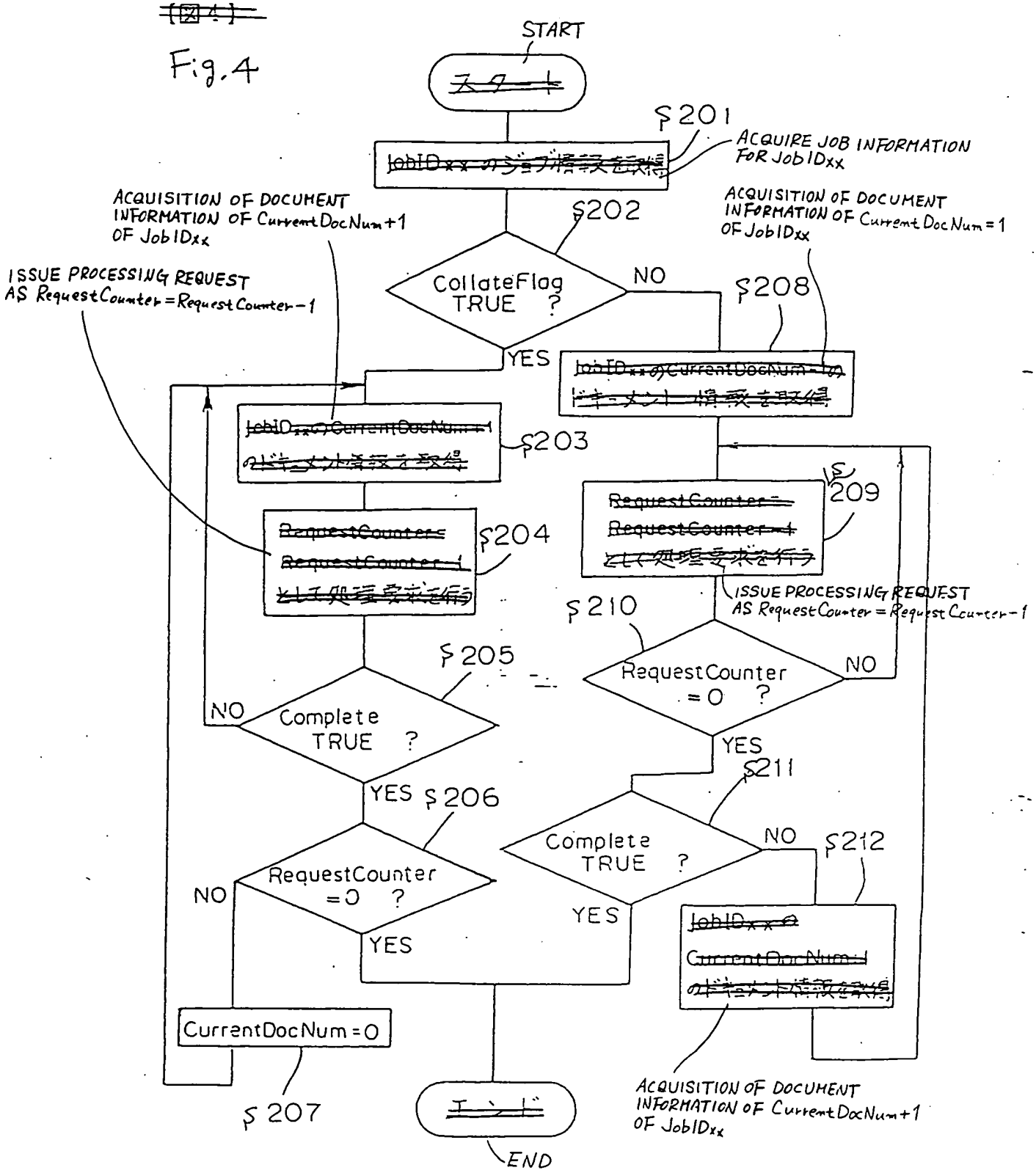
Fig. 3


START
S101
RECEIPT OF JOB REQUEST
S102
ID SET?
YES
NO
S105
ACQUIRE JOB INFORMATION FROM ID
SET ID, AND SET JOB INFORMATION
S103
S106
FINAL DOCUMENT?
YES
S107
NO
SET DOCUMENT INFORMATION
S104
S108
WRITE THE NUMBER OF DOCUMENTS INTO JOB INFORMATION OF THAT ID
SEND ID BACK TO TERMINAL
S109
S110
STORE JOB IN HOLD QUEUE
YES
JOB HOLD DESIGNATED?
NO
S111
RELEASE BY USER
ACCEPTANCE-COMPLETION TYPE SEQUENTIAL PROCESSING?
S112
YES
STORE JOB IN SPOOL QUEUE
S114
S115
NO
S113
ALL DOCUMENTS COMPLETELY ACCEPTED
SELECT PRINTER, AND STORE JOB IN CORRESPONDING PRINTER QUEUE
S116
ISSUE PROCESSING REQUEST FOR DOCUMENT INCLUDED IN JOB
S117
YES
NO OTHER DOCUMENTS?
S118
NO
STORE DOCUMENT IN CORRESPONDING TERMINATE QUEUE
END

~~整理番号 FK950081 (図面) ページ (4 / 9)~~

~~[図4]~~

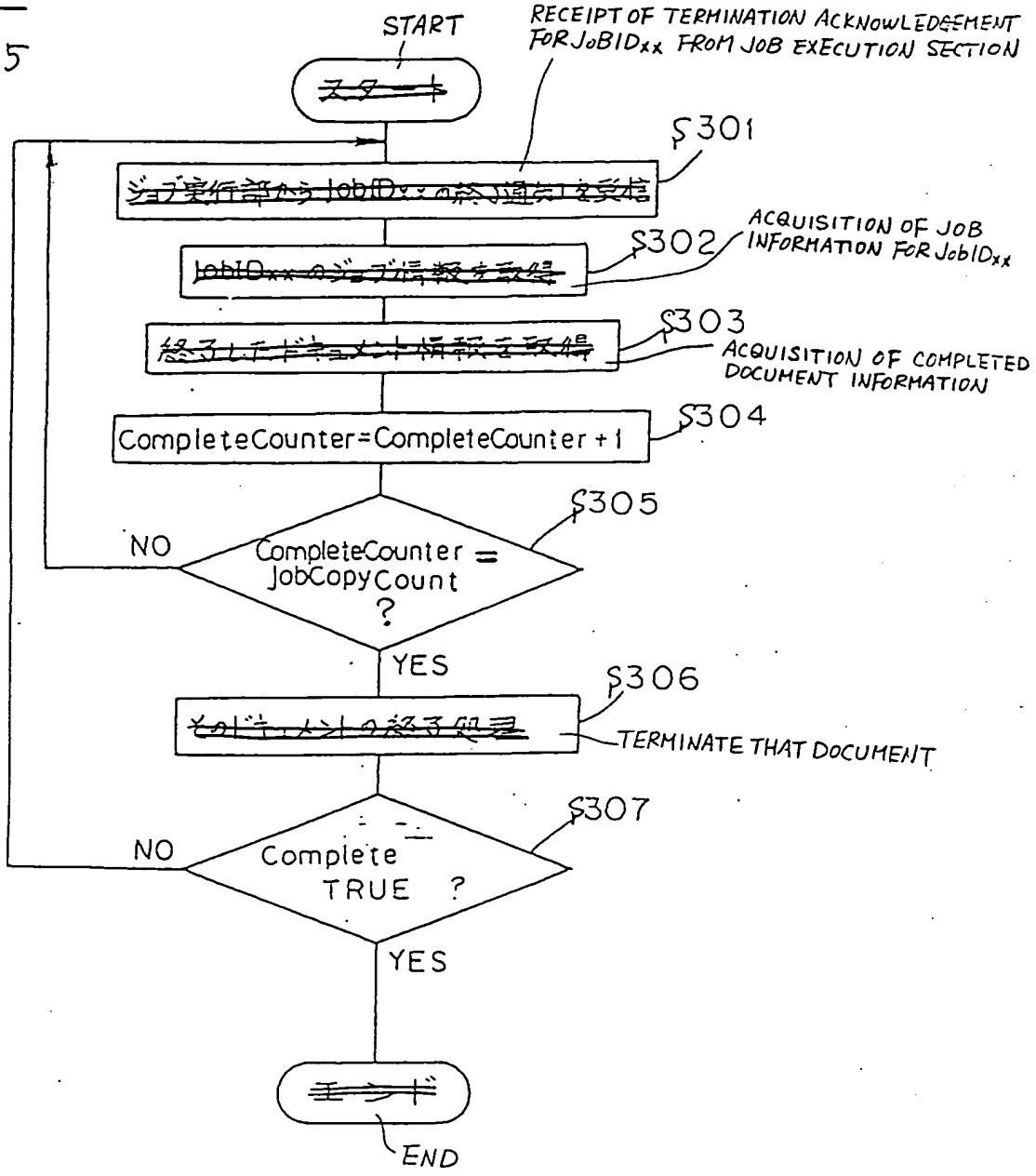
Fig.4



~~整理番号=FK950008-1 (図面) ページ(5/ 9)~~

~~[図5]~~

Fig. 5



6805620 - 0208962

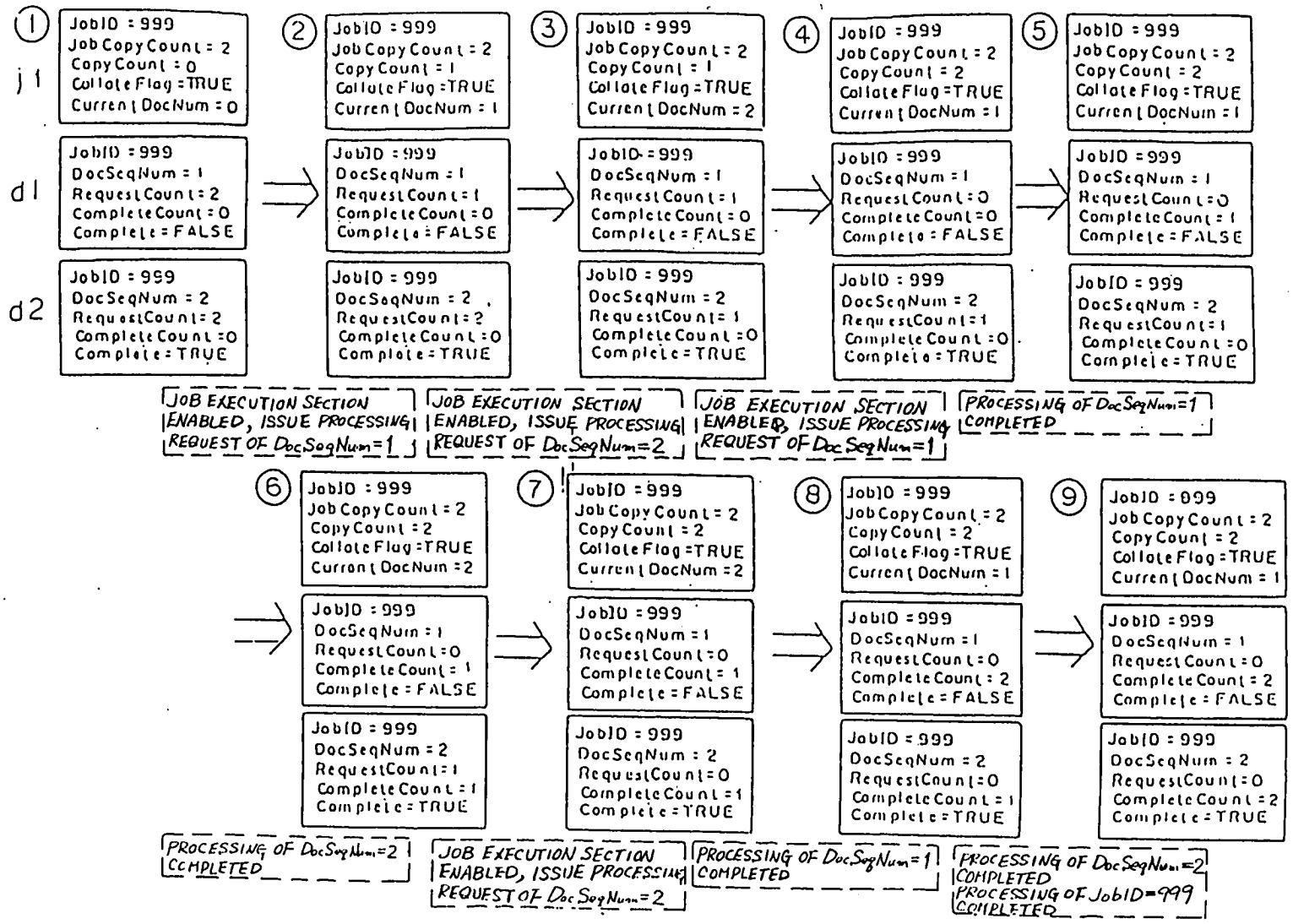
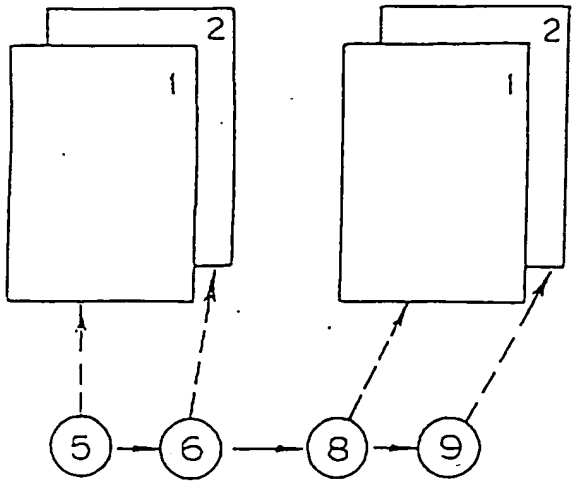


Fig. 6

【図7】 Fig. 7



0 0 0

6802620 "02078690

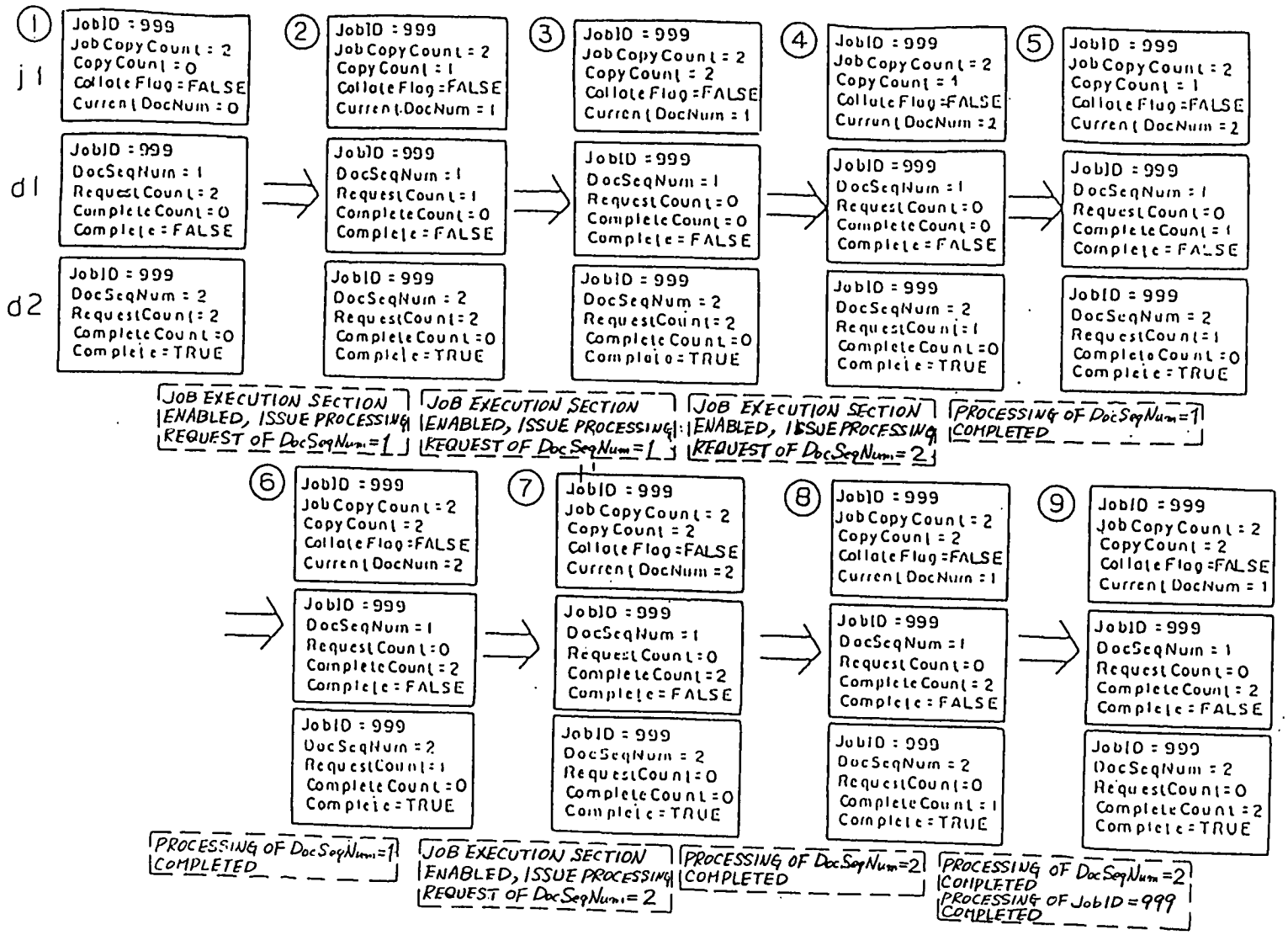
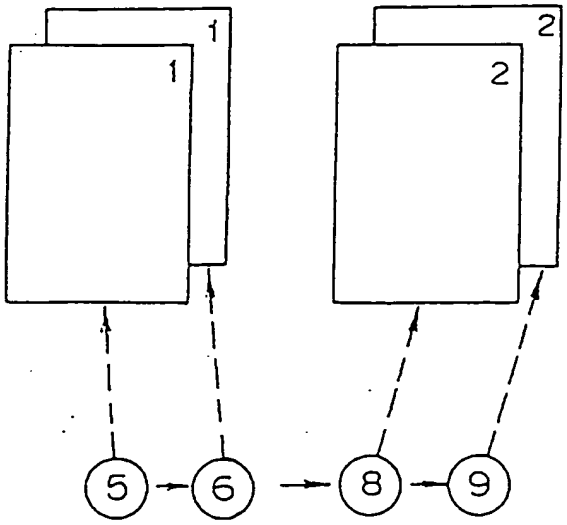


Fig. 8

~~整理番号=EK950008-1 (図面) ページ(9/ 9)~~

~~【図9】~~ Fig. 9



SUBSTITUTE SHEET

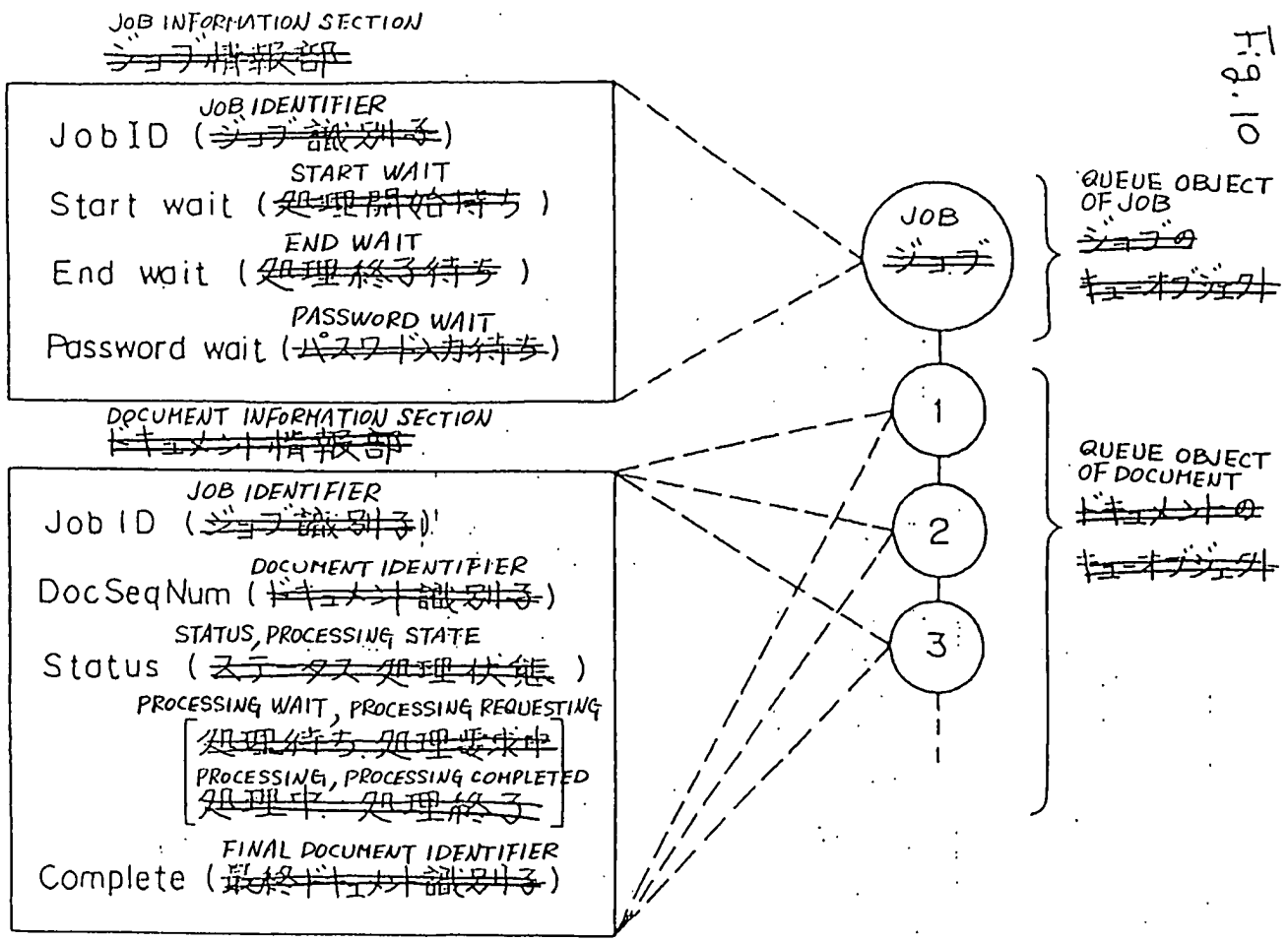


Fig. 10

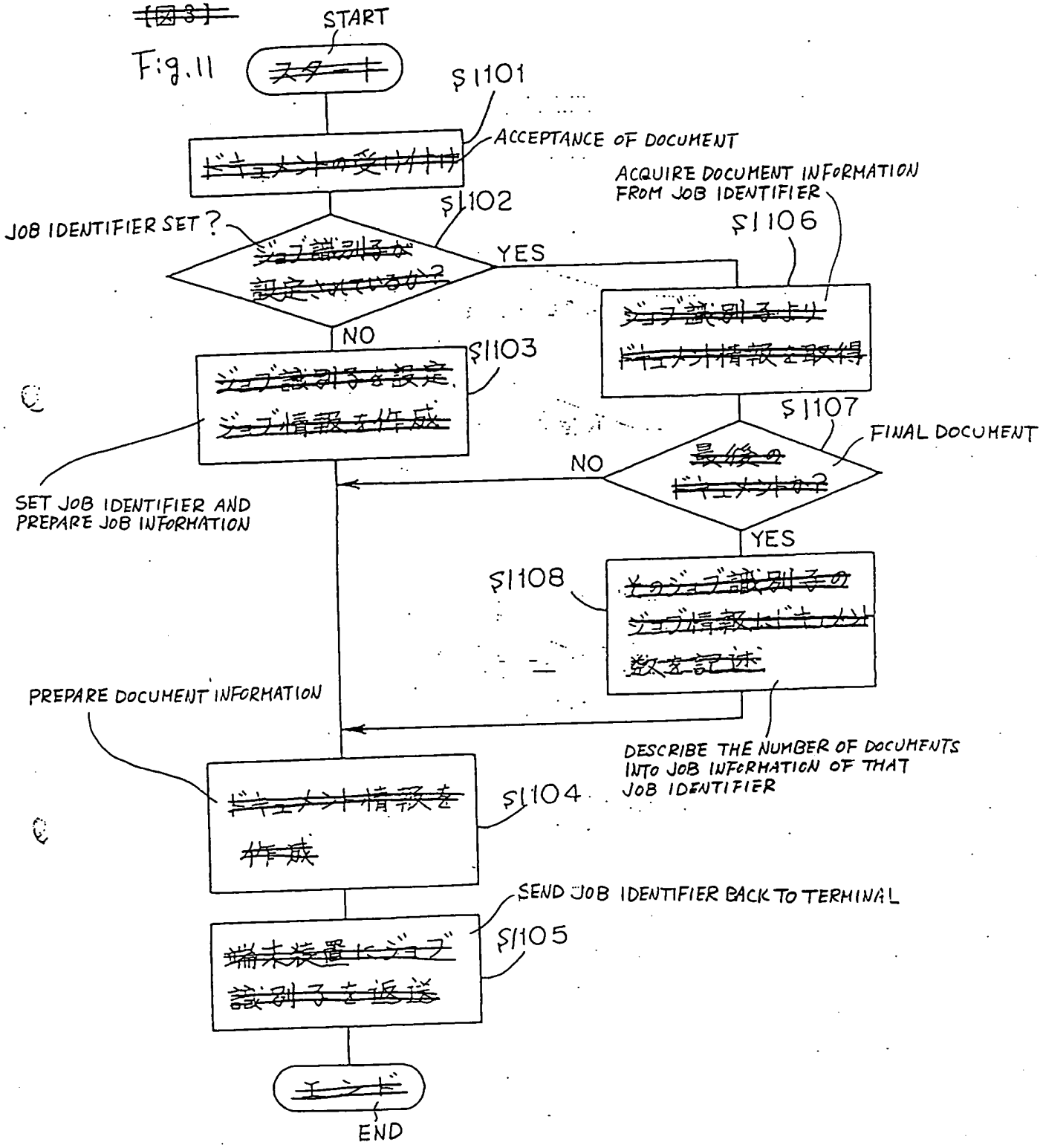
第10図

整理番号 FK9-500-082 (国内) ページ 2/ 14

~~整理番号=FK950008? (図面) ページ(3/ 13)~~

~~(図3)~~

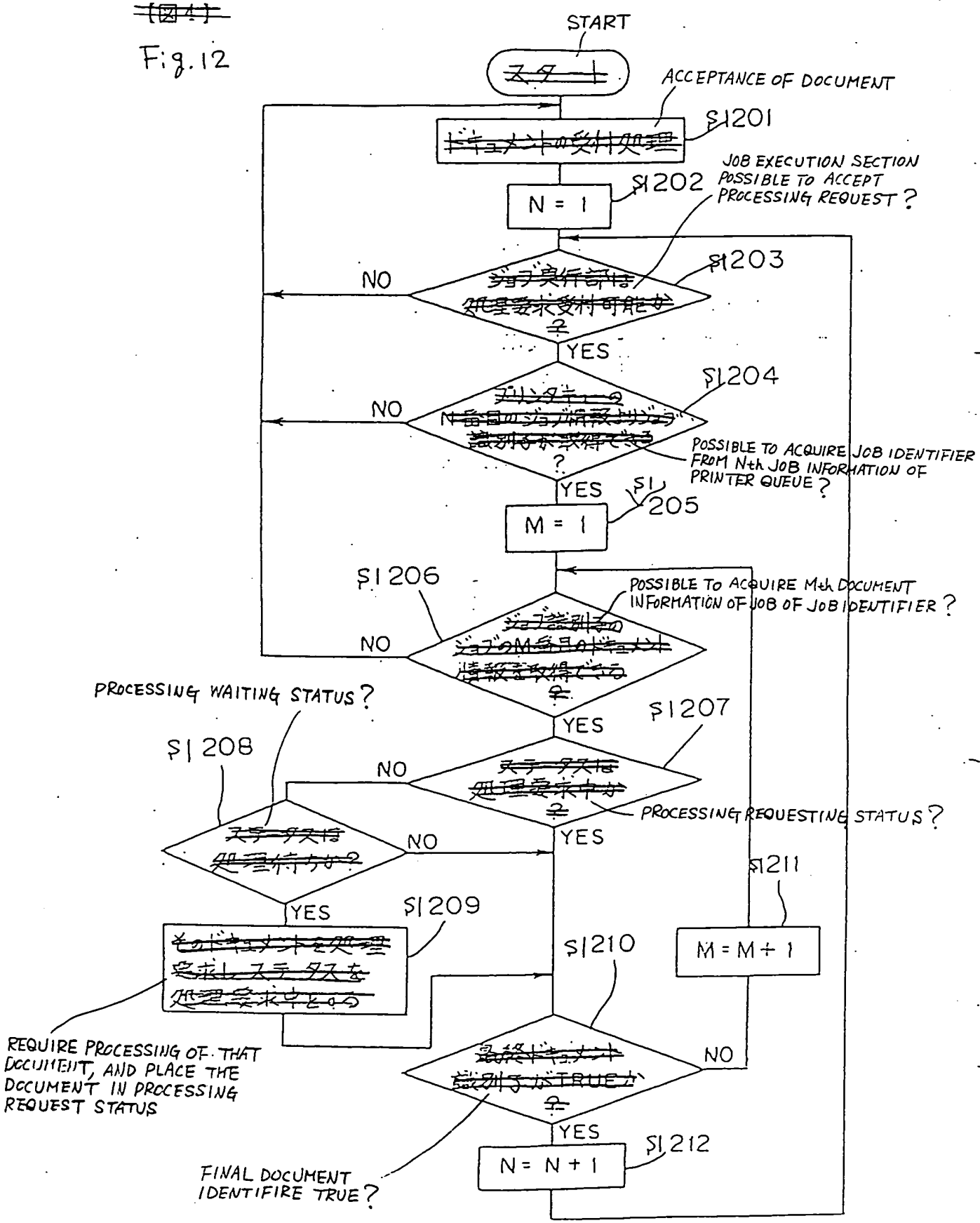
Fig.11



~~整理番号=FK95-00082 (図面) ページ(4/13)~~

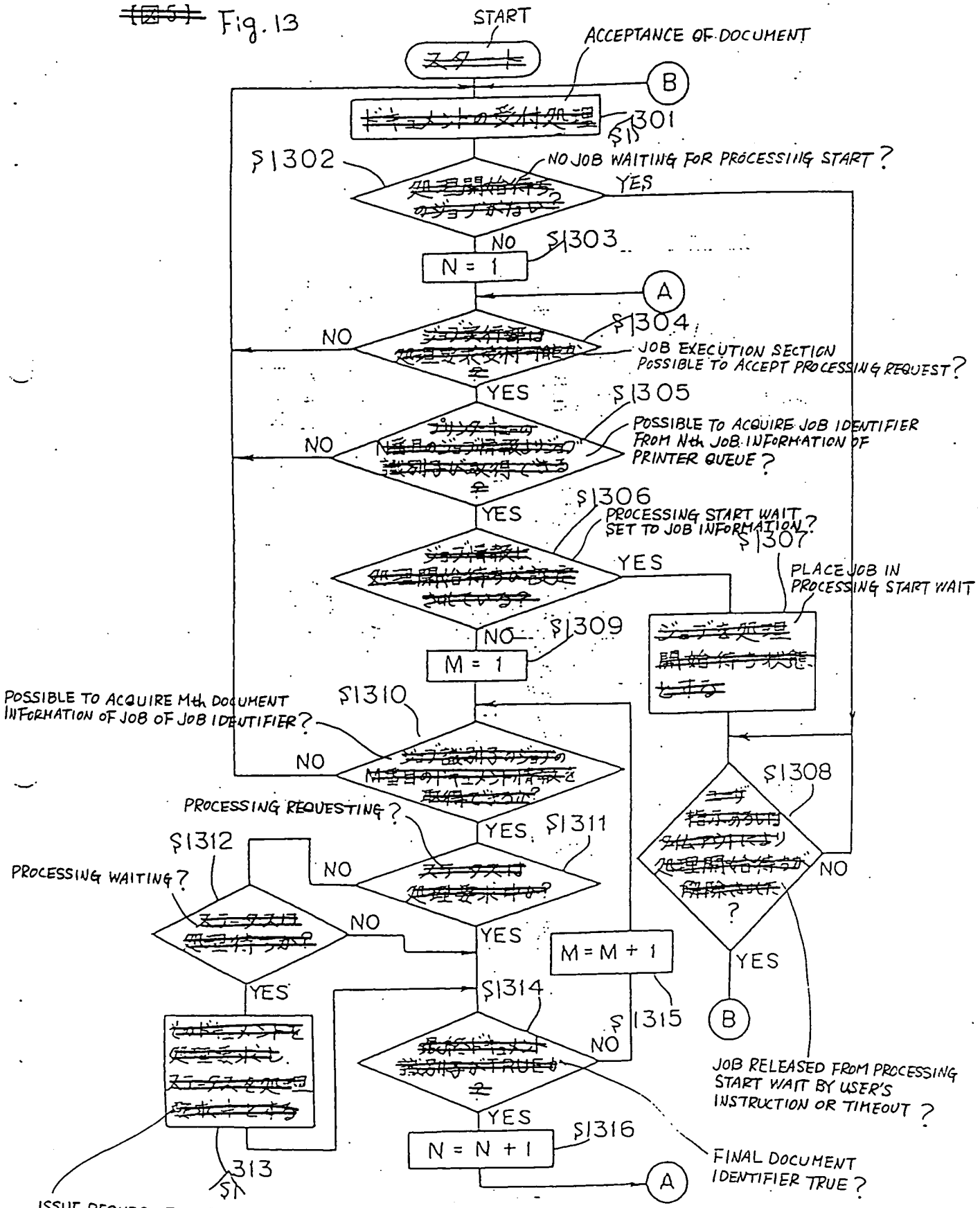
~~(図4)~~

Fig.12



~~整理番号=FK950008-2 (図面) ページ(5/13)~~

~~(図5)~~ Fig. 13



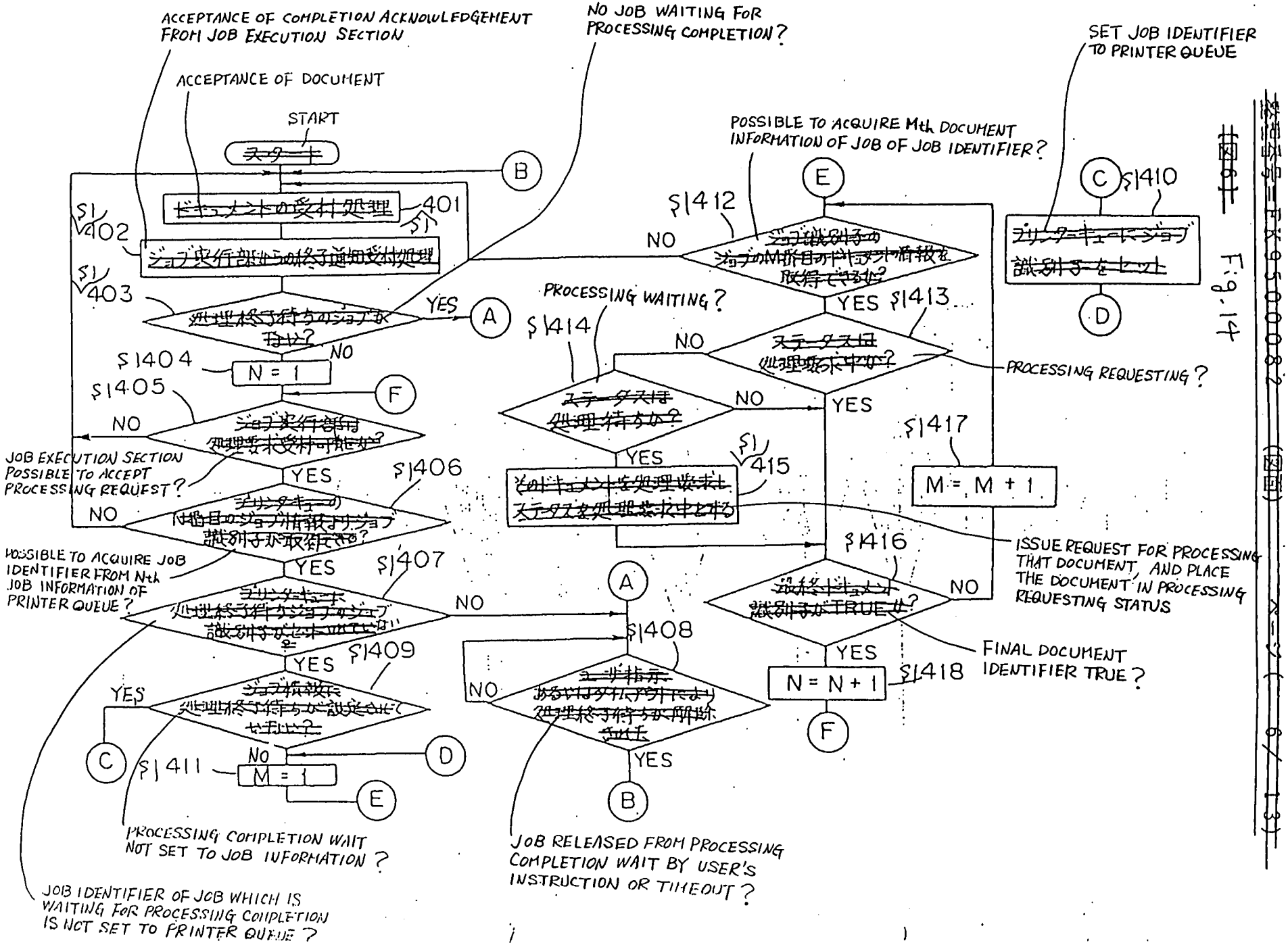
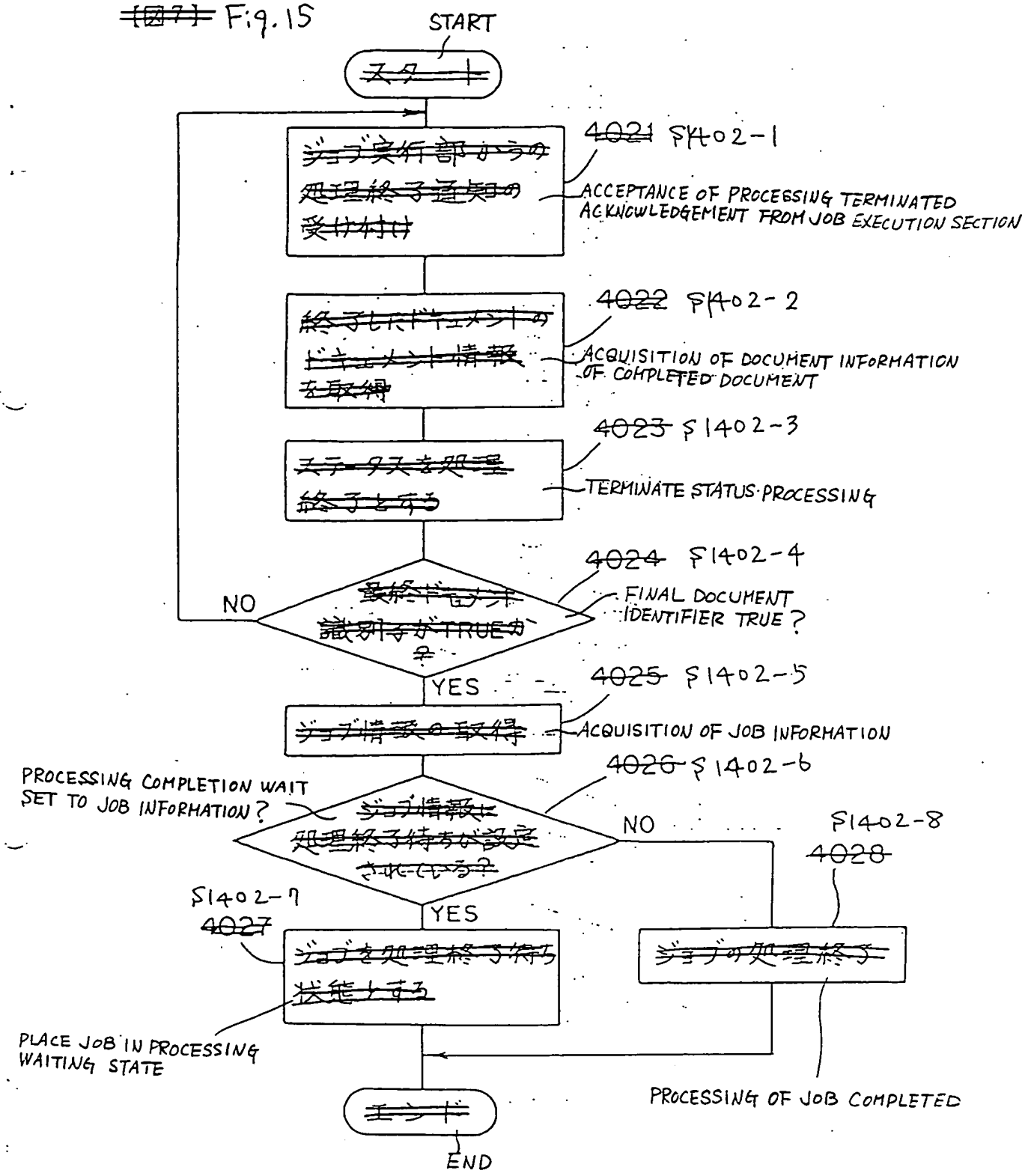

START
ACCEPTANCE OF DOCUMENT
401
S1402
ACCEPTANCE OF COMPLETION ACKNOWLEDGEMENT FROM JOB EXECUTION SECTION
S1403
YES
A
NO
S1404
N = 1
F
S1405
NO
JOB EXECUTION SECTION POSSIBLE TO ACCEPT PROCESSING REQUEST?
YES
S1406
NO
POSSIBLE TO ACQUIRE JOB IDENTIFIER FROM Nth JOB INFORMATION OF PRINTER QUEUE?
YES
S1407
NO
YES
S1409
YES
C
NO
D
S1411
M = 1
E
PROCESSING COMPLETION WAIT NOT SET TO JOB INFORMATION?
JOB IDENTIFIER OF JOB WHICH IS WAITING FOR PROCESSING COMPLETION IS NOT SET TO PRINTER QUEUE?
A
S1408
NO
YES
B
JOB RELEASED FROM PROCESSING COMPLETION WAIT BY USER'S INSTRUCTION OR TIMEOUT?
NO JOB WAITING FOR PROCESSING COMPLETION?
B
S1412
NO
YES
E
POSSIBLE TO ACQUIRE Mth DOCUMENT INFORMATION OF JOB OF JOB IDENTIFIER?
S1413
NO
YES
PROCESSING REQUESTING?
PROCESSING WAITING?
S1414
NO
YES
S1415
S1416
NO
YES
FINAL DOCUMENT IDENTIFIER TRUE?
S1417
M = M + 1
ISSUE REQUEST FOR PROCESSING THAT DOCUMENT, AND PLACE THE DOCUMENT IN PROCESSING REQUESTING STATUS
S1418
N = N + 1
F
SET JOB IDENTIFIER TO PRINTER QUEUE
C
S1410
D

Fig. 14

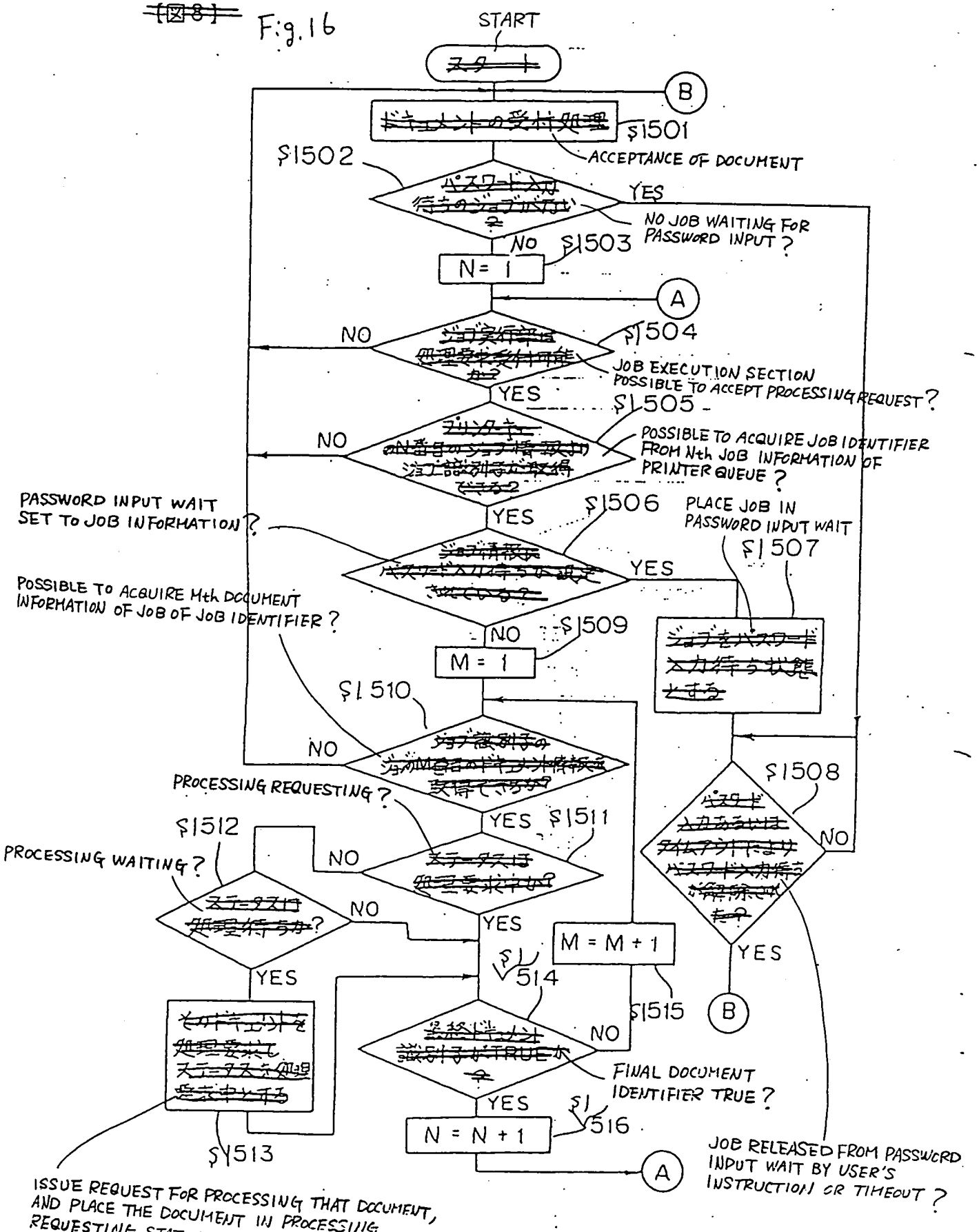
~~整理番号=FK950008-2 (図面) ページ(7/ 13)~~

~~(図7)~~ Fig. 15



~~整理番号=FK950008-2 (図面) ページ(8/13)~~

~~[図8]~~ Fig. 16



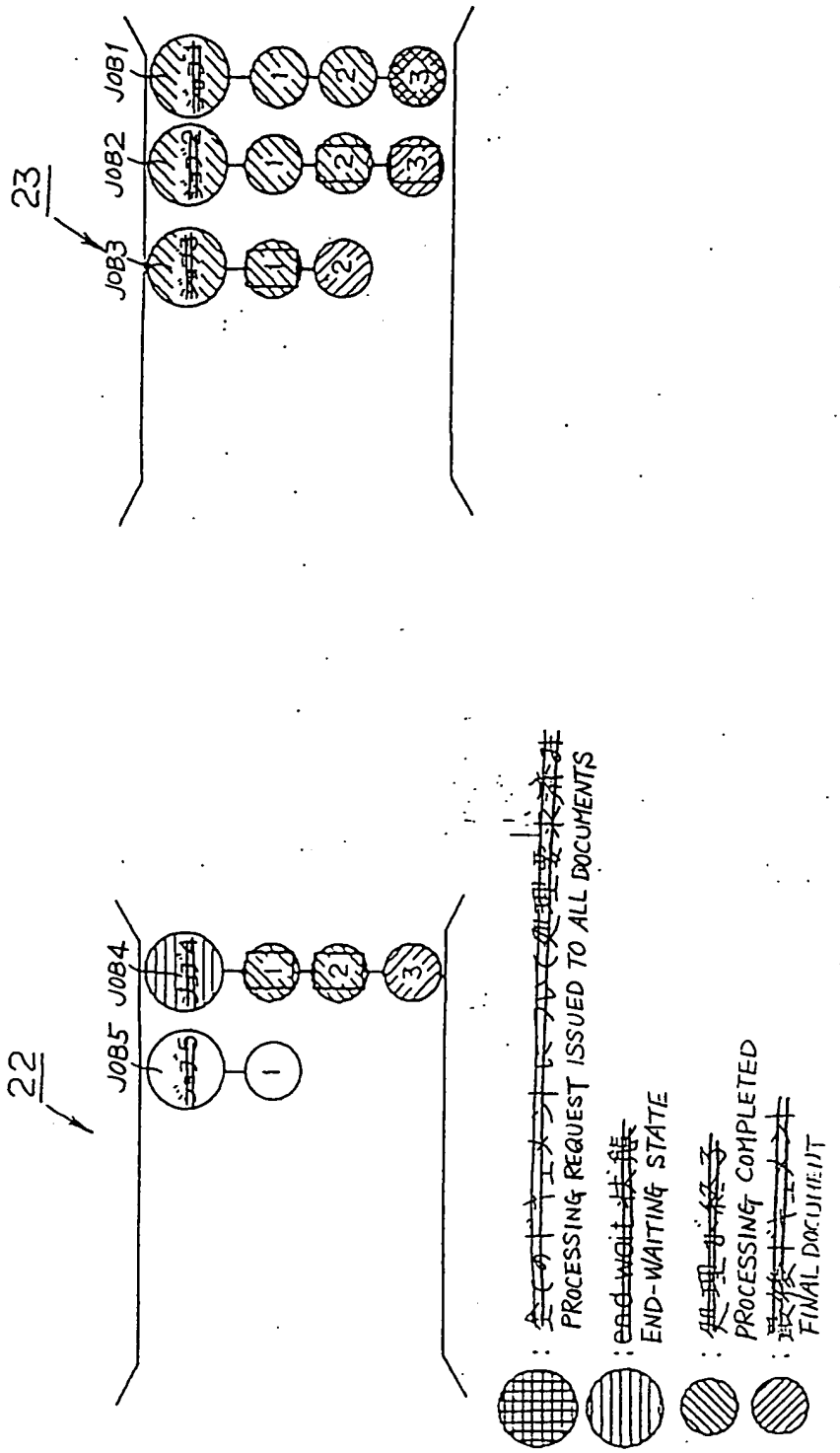
~~【図9】~~ Fig.9

23
JOB1
22
JOB2
JOB3
JOB4
JOB5
: PROCESSING REQUEST ISSUED TO ALL DOCUMENTS
: START-WAITING STATE
: PROCESSING COMPLETED
: FINAL DOCUMENT

~~整理番号＝FK950082 (図面) ページ(10/13)~~

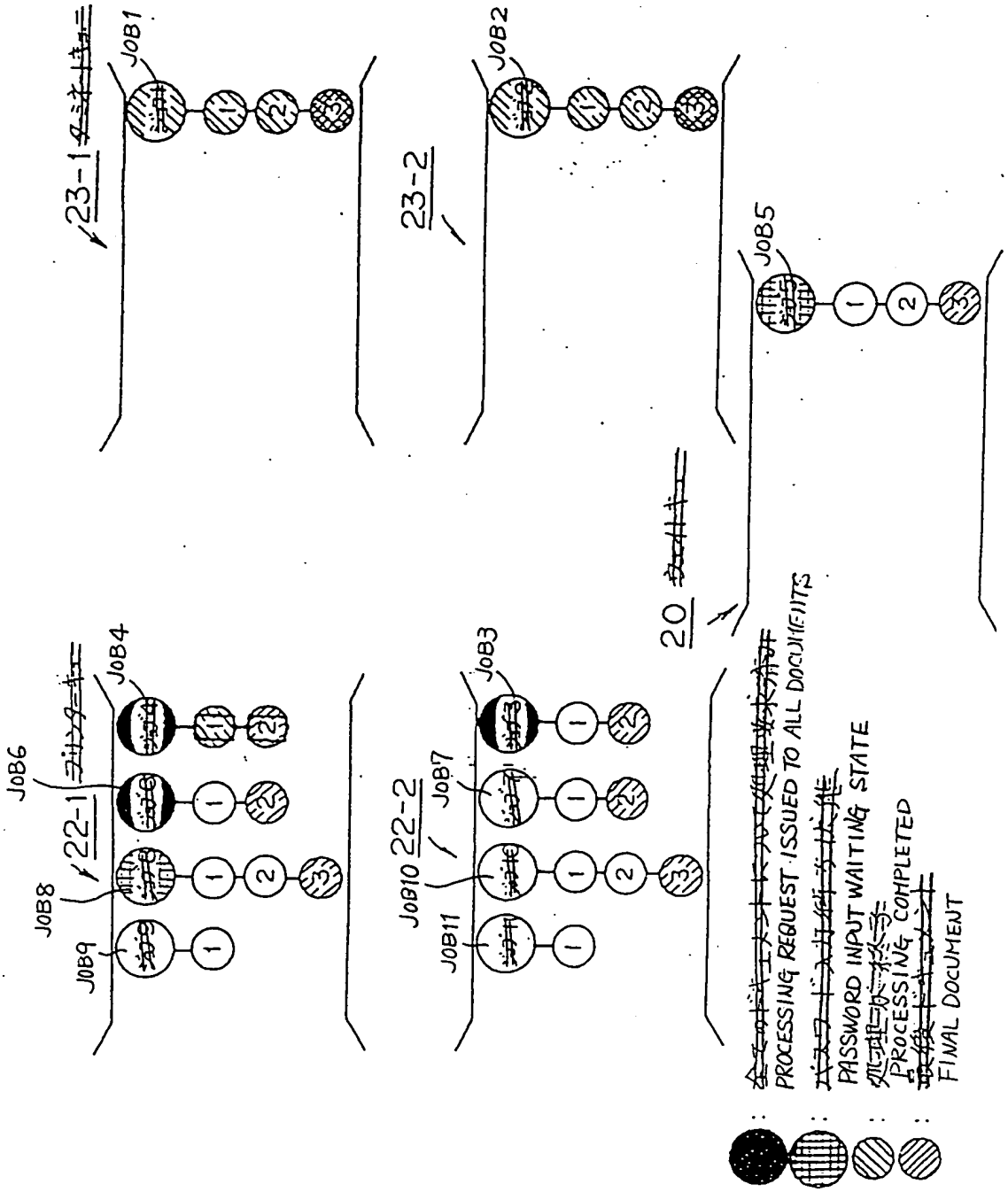
~~図10~~ Fig. 18

(図11) Fig. 19


JOB1
JOB2
JOB3
23
JOB4
JOB5
22
: 全ての申込み書類に処理要求が出された
PROCESSING REQUEST ISSUED TO ALL DOCUMENTS
: end-wait 状態
END-WAITING STATE
: 処理が終了
PROCESSING COMPLETED
: 最後の申込み書類
FINAL DOCUMENT

~~整理番号=FK950082 (図面) ページ(12/13)~~

~~図12~~ Fig. 20



~~整理番号=FK950082 (図面) ページ(13/13)~~

~~(図13)~~

Fig. 21

Rrior Art

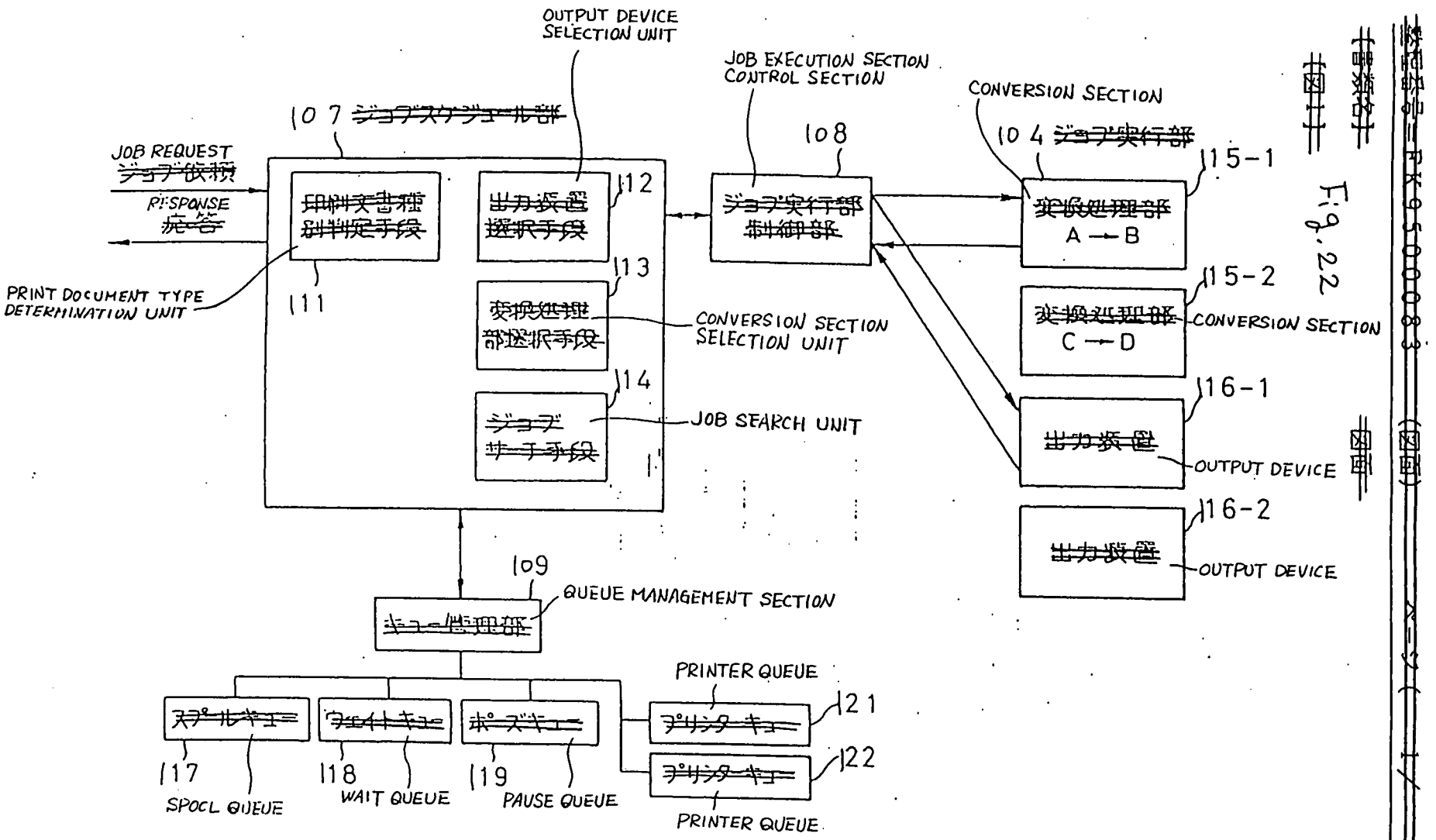
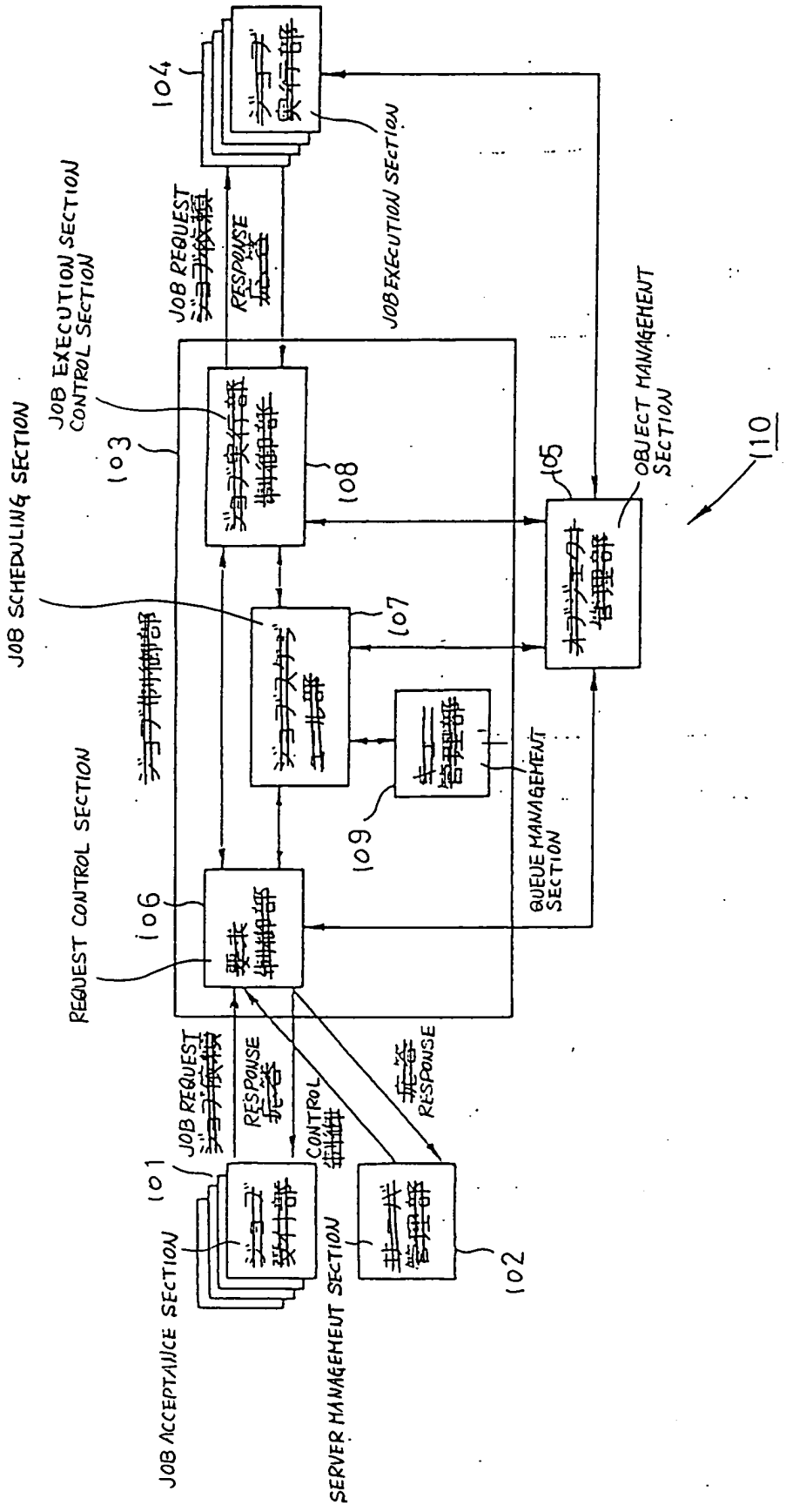
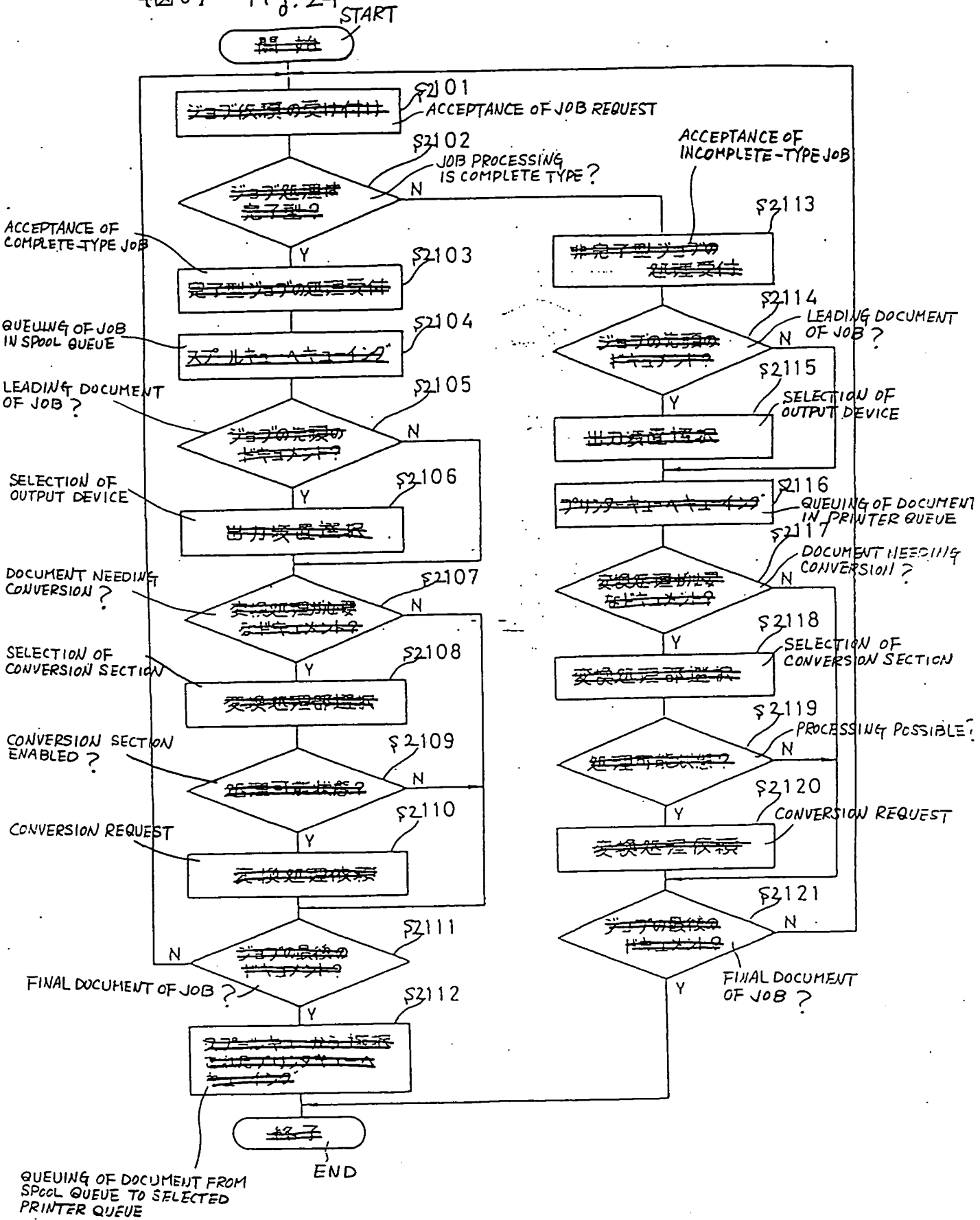

OUTPUT DEVICE SELECTION UNIT
JOB EXECUTION SECTION CONTROL SECTION
CONVERSION SECTION
107
108
104
JOB REQUEST
RESPONSE
112
115-1
A → B
113
115-2
C → D
CONVERSION SECTION
PRINT DOCUMENT TYPE DETERMINATION UNIT
111
CONVERSION SECTION SELECTION UNIT
114
JOB SEARCH UNIT
116-1
OUTPUT DEVICE
116-2
OUTPUT DEVICE
109
QUEUE MANAGEMENT SECTION
PRINTER QUEUE
121
122
117
118
119
SPOOL QUEUE
WAIT QUEUE
PAUSE QUEUE
PRINTER QUEUE

Fig. 22

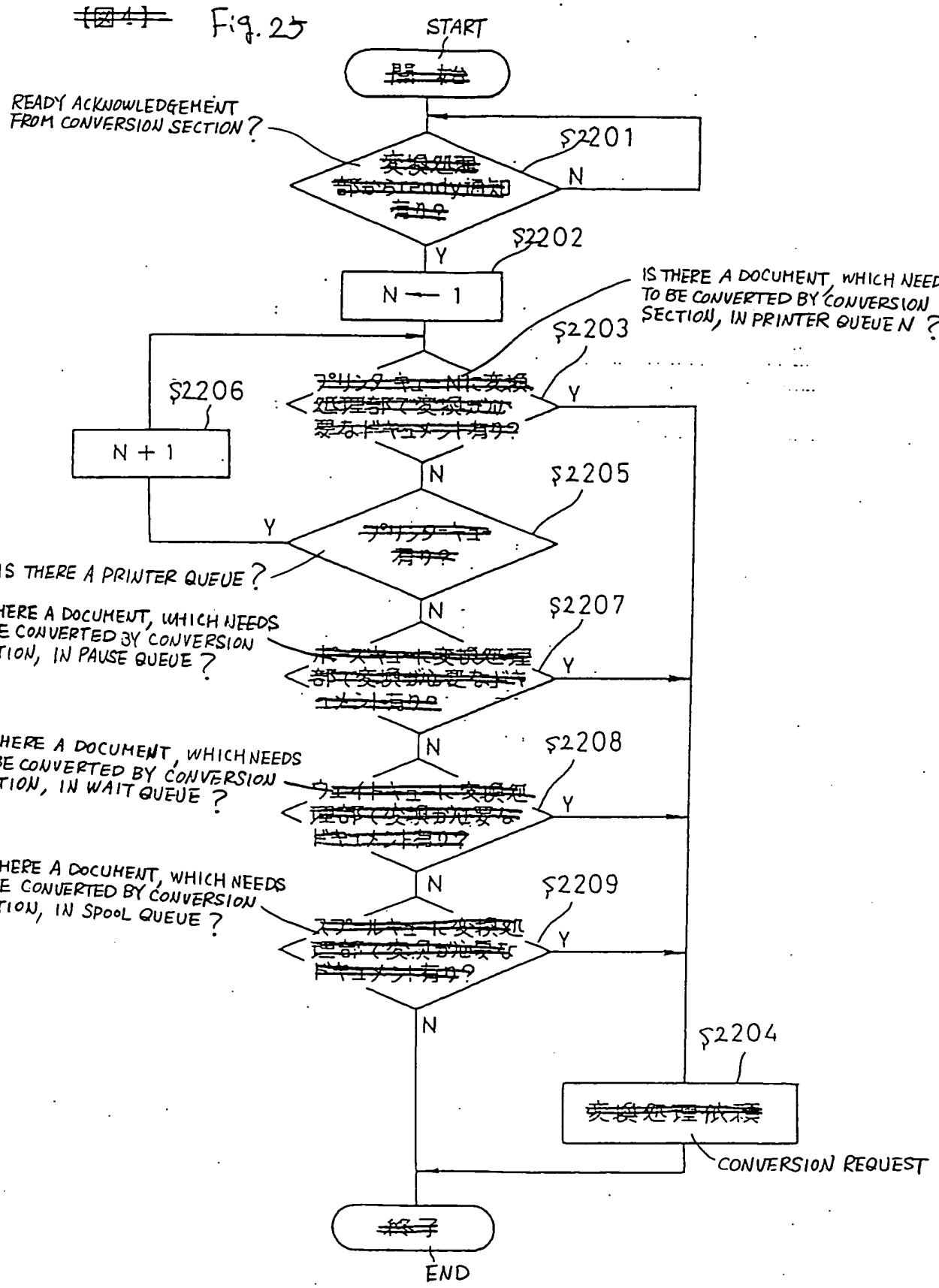
~~図2~~ Fig. 23


JOB ACCEPTANCE SECTION
SERVER MANAGEMENT SECTION
JOB SCHEDULING SECTION
JOB EXECUTION SECTION CONTROL SECTION
REQUEST CONTROL SECTION
QUEUE MANAGEMENT SECTION
OBJECT MANAGEMENT SECTION
JOB EXECUTION SECTION
JOB REQUEST
RESPONSE
CONTROL
101
102
103
104
105
106
107
108
109
110

【図3】 Fig. 24


START
S2101
ACCEPTANCE OF JOB REQUEST
S2102
JOB PROCESSING IS COMPLETE TYPE?
N
Y
ACCEPTANCE OF INCOMPLETE-TYPE JOB
S2113
ACCEPTANCE OF COMPLETE-TYPE JOB
S2103
S2104
QUEUING OF JOB IN SPOOL QUEUE
S2114
LEADING DOCUMENT OF JOB?
S2115
SELECTION OF OUTPUT DEVICE
S2105
LEADING DOCUMENT OF JOB?
S2106
SELECTION OF OUTPUT DEVICE
S2116
QUEUING OF DOCUMENT IN PRINTER QUEUE
S2117
DOCUMENT NEEDING CONVERSION?
S2107
DOCUMENT NEEDING CONVERSION?
S2118
SELECTION OF CONVERSION SECTION
S2108
SELECTION OF CONVERSION SECTION
S2119
PROCESSING POSSIBLE?
S2109
CONVERSION SECTION ENABLED?
S2120
CONVERSION REQUEST
S2110
CONVERSION REQUEST
S2121
FINAL DOCUMENT OF JOB?
S2111
FINAL DOCUMENT OF JOB?
S2112
QUEUING OF DOCUMENT FROM SPOOL QUEUE TO SELECTED PRINTER QUEUE
END

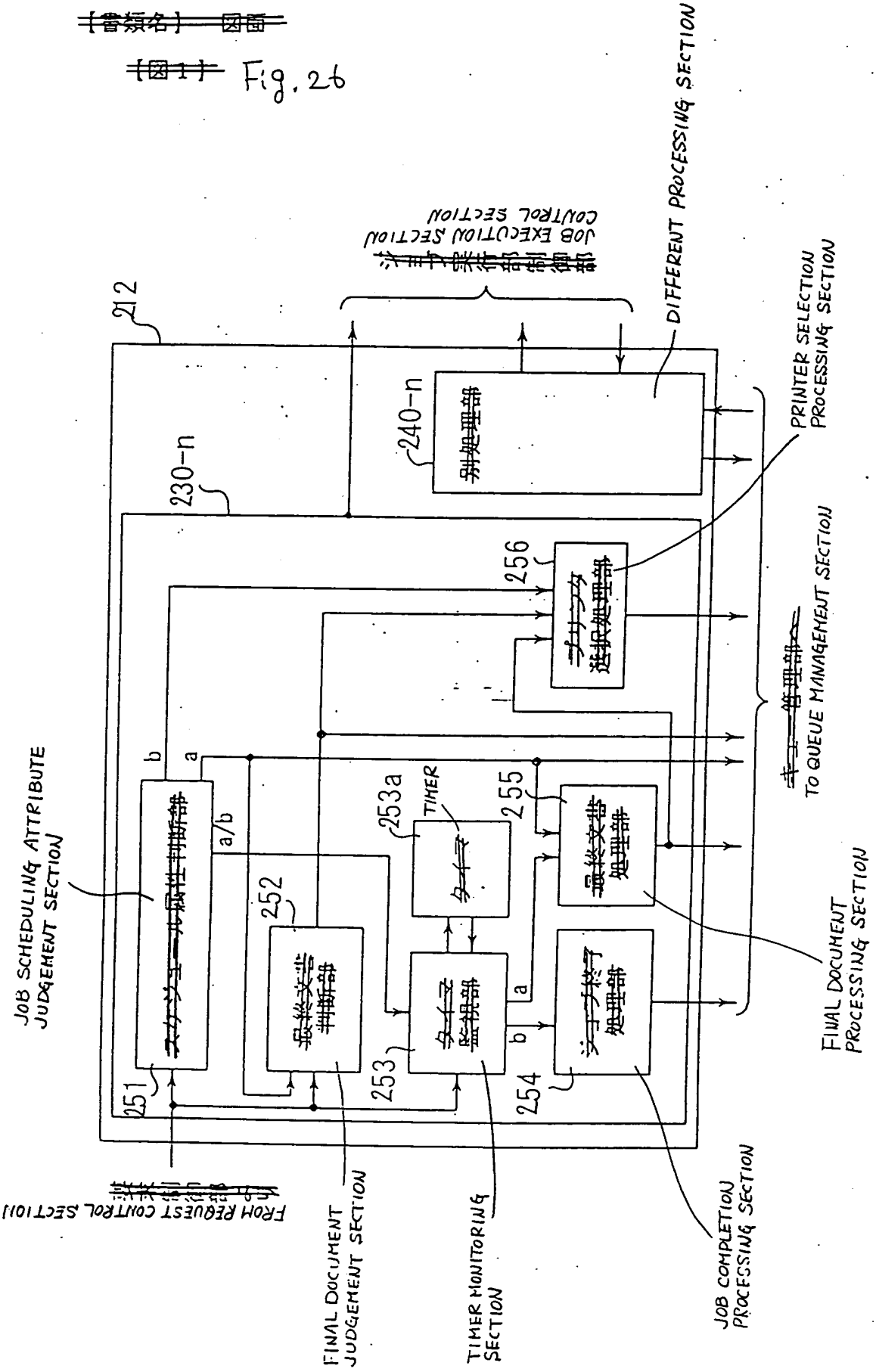
【図4】 Fig. 25


START
READY ACKNOWLEDGEMENT FROM CONVERSION SECTION ?
S2201
N
Y
S2202
N ← 1
IS THERE A DOCUMENT, WHICH NEEDS TO BE CONVERTED BY CONVERSION SECTION, IN PRINTER QUEUE N ?
S2203
Y
S2206
N + 1
N
S2205
Y
IS THERE A PRINTER QUEUE ?
N
S2207
IS THERE A DOCUMENT, WHICH NEEDS TO BE CONVERTED BY CONVERSION SECTION, IN PAUSE QUEUE ?
Y
N
S2208
IS THERE A DOCUMENT, WHICH NEEDS TO BE CONVERTED BY CONVERSION SECTION, IN WAIT QUEUE ?
Y
N
S2209
IS THERE A DOCUMENT, WHICH NEEDS TO BE CONVERTED BY CONVERSION SECTION, IN SPOOL QUEUE ?
Y
N
S2204
CONVERSION REQUEST
END

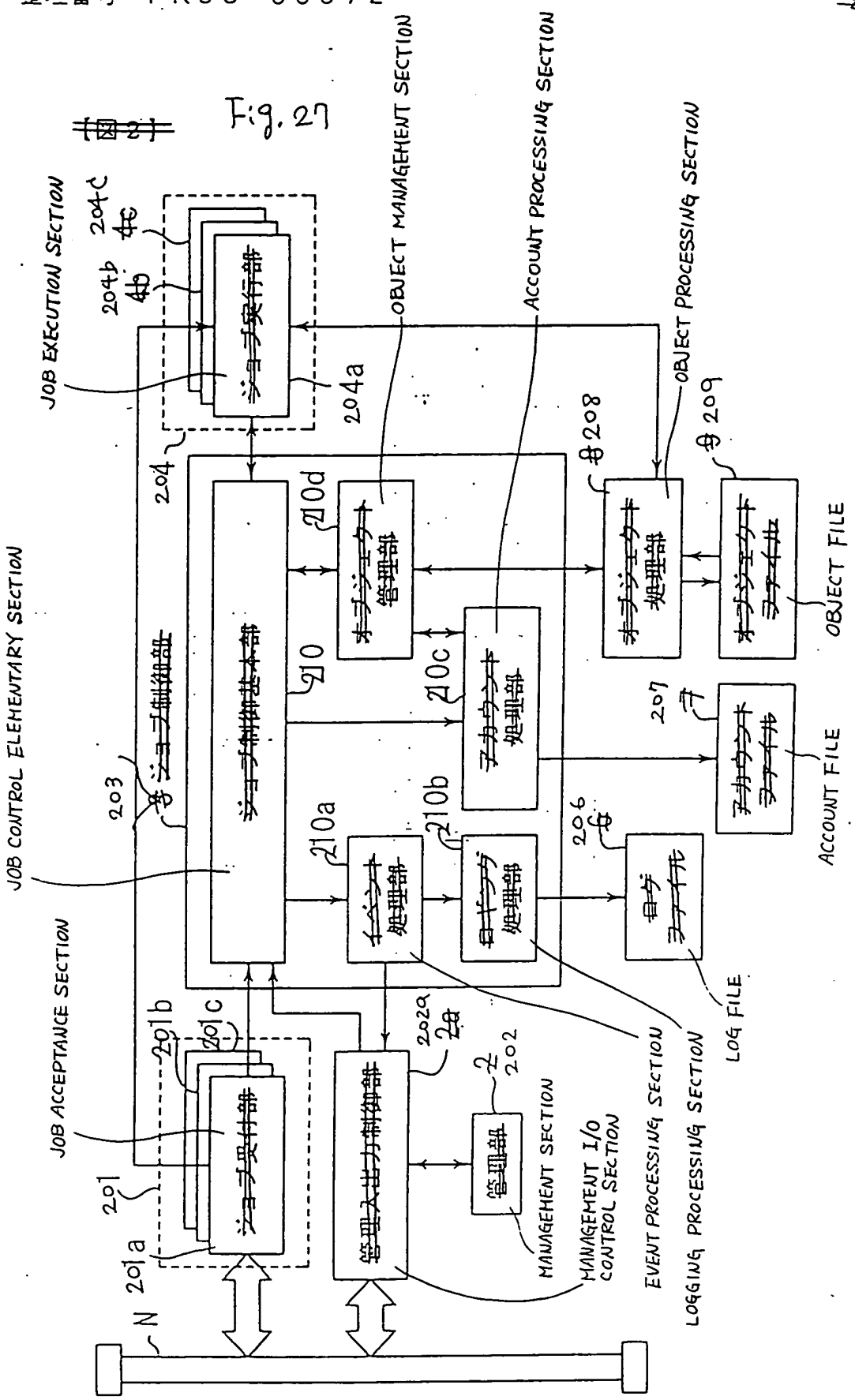
~~整理番号 FK95-00072~~

~~【書類名】 図面~~

~~【図1】~~ Fig. 26



~~第2図~~ Fig. 27


JOB EXECUTION SECTION
OBJECT MANAGEMENT SECTION
ACCOUNT PROCESSING SECTION
OBJECT PROCESSING SECTION
JOB CONTROL ELEMENTARY SECTION
JOB ACCEPTANCE SECTION
EVENT PROCESSING SECTION
LOGGING PROCESSING SECTION
MANAGEMENT I/O CONTROL SECTION
MANAGEMENT SECTION
OBJECT FILE
ACCOUNT FILE
LOG FILE
N
201
201a
201b
201c
202
2
202a
2a
203
204
204a
204b
4b
204c
4c
205
5
206
6
207
7
208
8
209
9
210
10
210a
210b
210c
210d

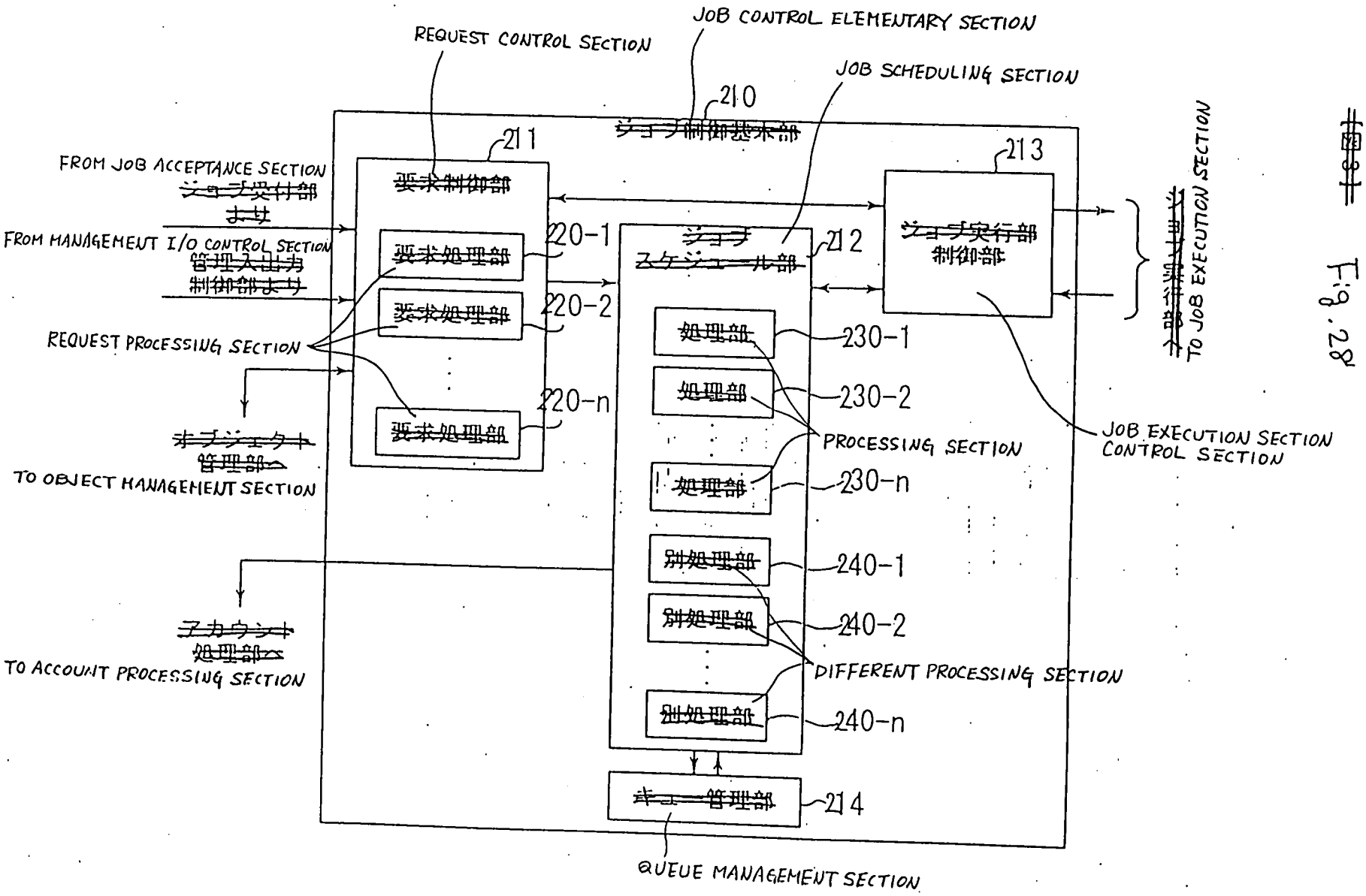
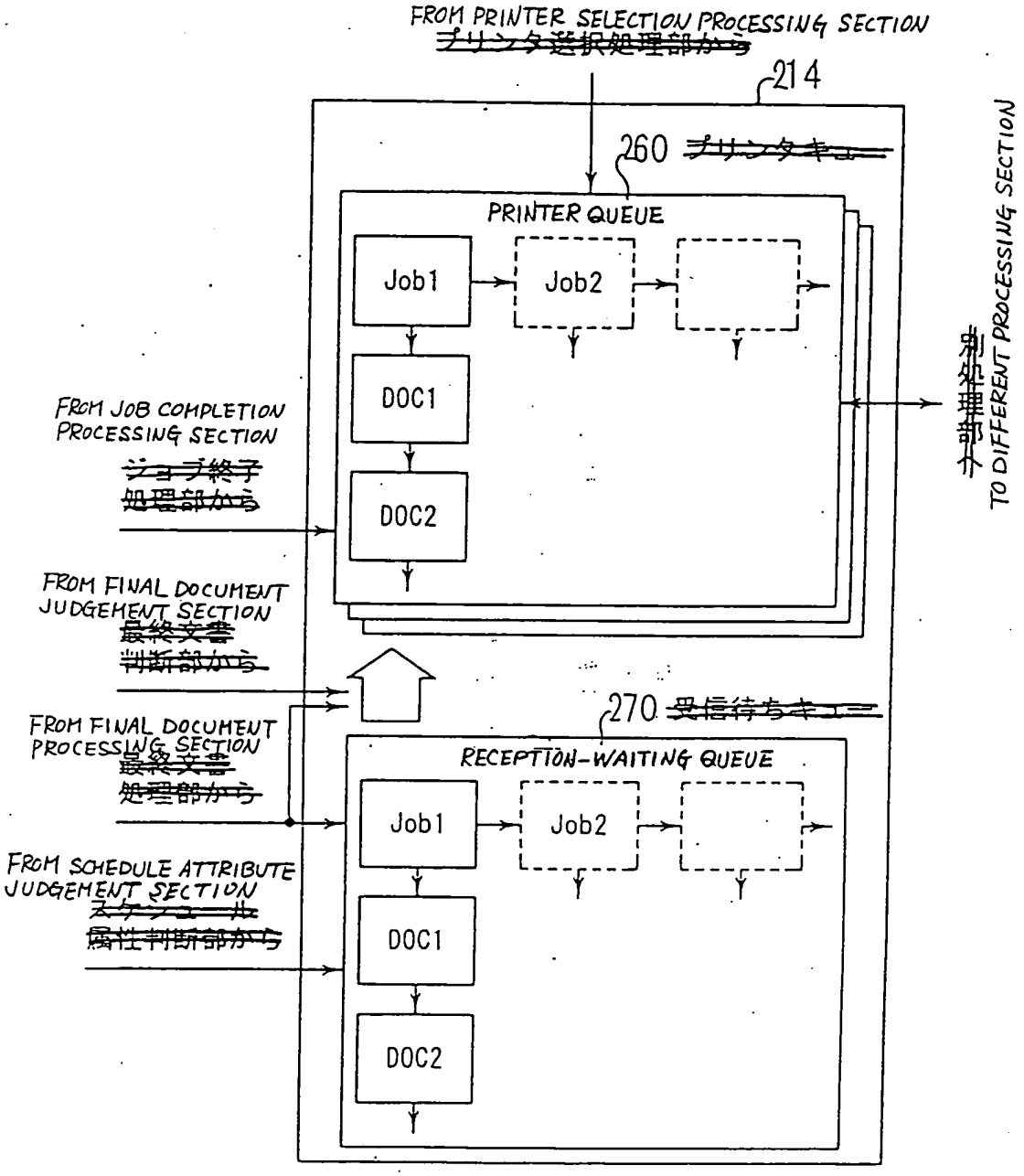

JOB CONTROL ELEMENTARY SECTION
REQUEST CONTROL SECTION
JOB SCHEDULING SECTION
210
211
213
212
FROM JOB ACCEPTANCE SECTION
FROM MANAGEMENT I/O CONTROL SECTION
REQUEST PROCESSING SECTION
220-1
220-2
220-n
230-1
230-2
230-n
PROCESSING SECTION
240-1
240-2
240-n
DIFFERENT PROCESSING SECTION
TO JOB EXECUTION SECTION
JOB EXECUTION SECTION CONTROL SECTION
TO OBJECT MANAGEMENT SECTION
TO ACCOUNT PROCESSING SECTION
214
QUEUE MANAGEMENT SECTION

Fig. 28

図4 Fig. 29


FROM PRINTER SELECTION PROCESSING SECTION
214
260
PRINTER QUEUE
Job1
Job2
DOC1
DOC2
TO DIFFERENT PROCESSING SECTION
FROM JOB COMPLETION PROCESSING SECTION
FROM FINAL DOCUMENT JUDGEMENT SECTION
FROM FINAL DOCUMENT PROCESSING SECTION
270
RECEPTION-WAITING QUEUE
Job1
Job2
DOC1
DOC2
FROM SCHEDULE ATTRIBUTE JUDGEMENT SECTION

~~整理番号 1695-00072~~

~~[図5]~~ ~~Fig.30~~

Fig.30a

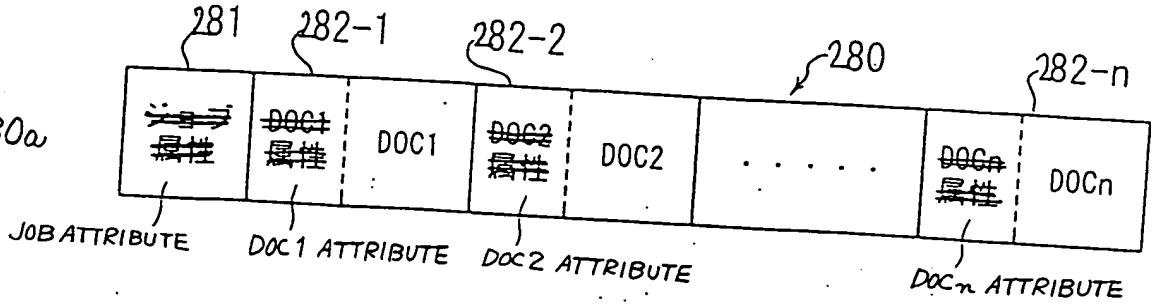


Fig.30b

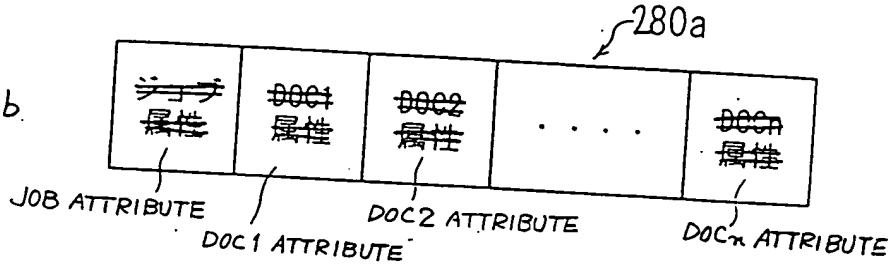


Fig.30c

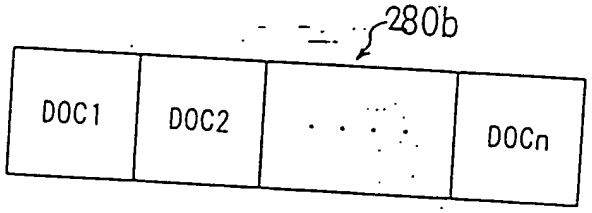
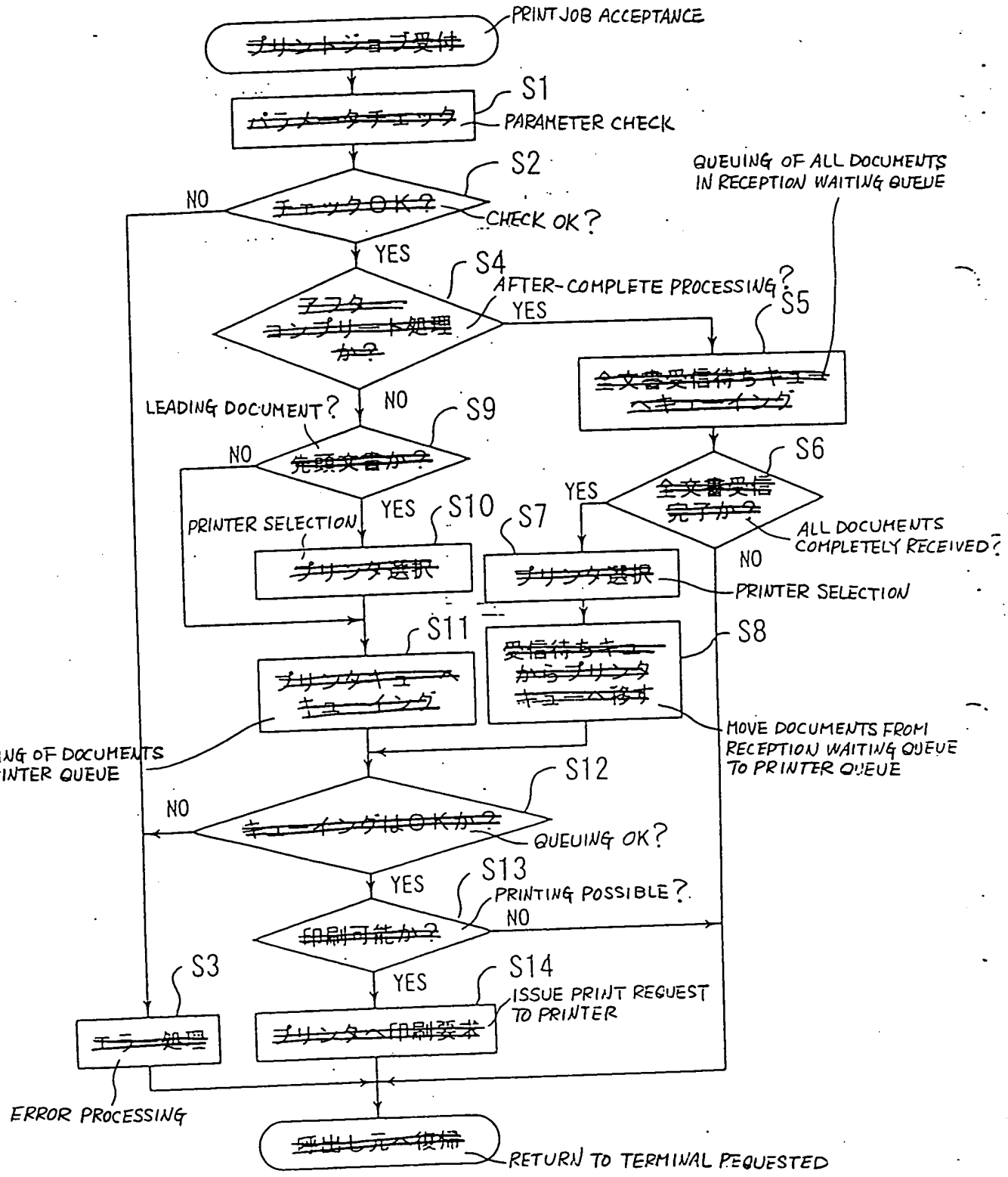
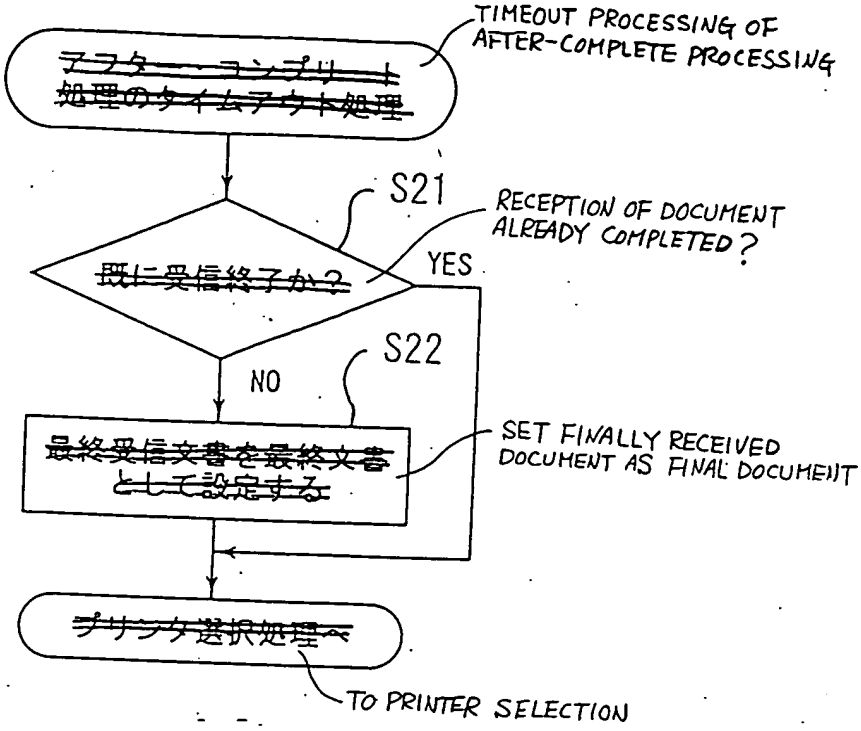


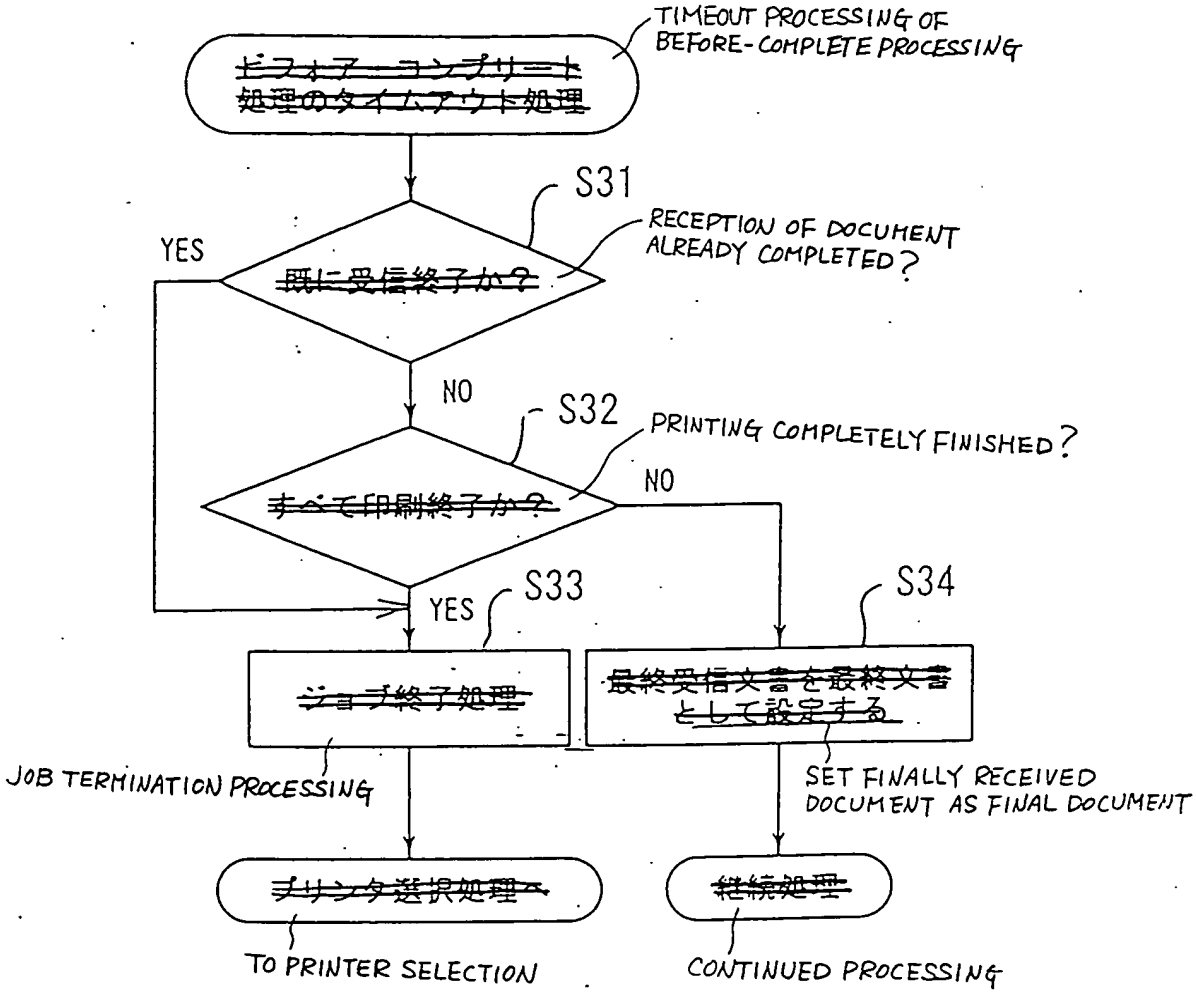
Fig. 31


PRINT JOB ACCEPTANCE
S1
PARAMETER CHECK
S2
CHECK OK?
NO
YES
S4
AFTER-COMPLETE PROCESSING?
YES
S5
QUEUING OF ALL DOCUMENTS IN RECEPTION WAITING QUEUE
LEADING DOCUMENT?
NO
S9
NO
YES
S6
ALL DOCUMENTS COMPLETELY RECEIVED?
NO
PRINTER SELECTION
YES
S10
S7
PRINTER SELECTION
S11
S8
MOVE DOCUMENTS FROM RECEPTION WAITING QUEUE TO PRINTER QUEUE
QUEUING OF DOCUMENTS IN PRINTER QUEUE
S12
NO
QUEUING OK?
YES
S13
PRINTING POSSIBLE?
NO
YES
S3
S14
ISSUE PRINT REQUEST TO PRINTER
ERROR PROCESSING
RETURN TO TERMINAL REQUESTED

~~【図7】~~ Fig. 32


~~アフターコンプリート処理のタイムアウト処理~~
TIMEOUT PROCESSING OF AFTER-COMPLETE PROCESSING
S21
~~既に受信終了か？~~
RECEPTION OF DOCUMENT ALREADY COMPLETED ?
YES
NO
S22
~~最終受信文書を最終文書として設定する~~
SET FINALLY RECEIVED DOCUMENT AS FINAL DOCUMENT
~~プリンタ選択処理へ~~
TO PRINTER SELECTION

~~図8~~ Fig. 33


TIMEOUT PROCESSING OF BEFORE-COMPLETE PROCESSING
S31
RECEPTION OF DOCUMENT ALREADY COMPLETED?
YES
NO
S32
PRINTING COMPLETELY FINISHED?
NO
YES
S33
S34
JOB TERMINATION PROCESSING
SET FINALLY RECEIVED DOCUMENT AS FINAL DOCUMENT
TO PRINTER SELECTION
CONTINUED PROCESSING

09852000 - 020394

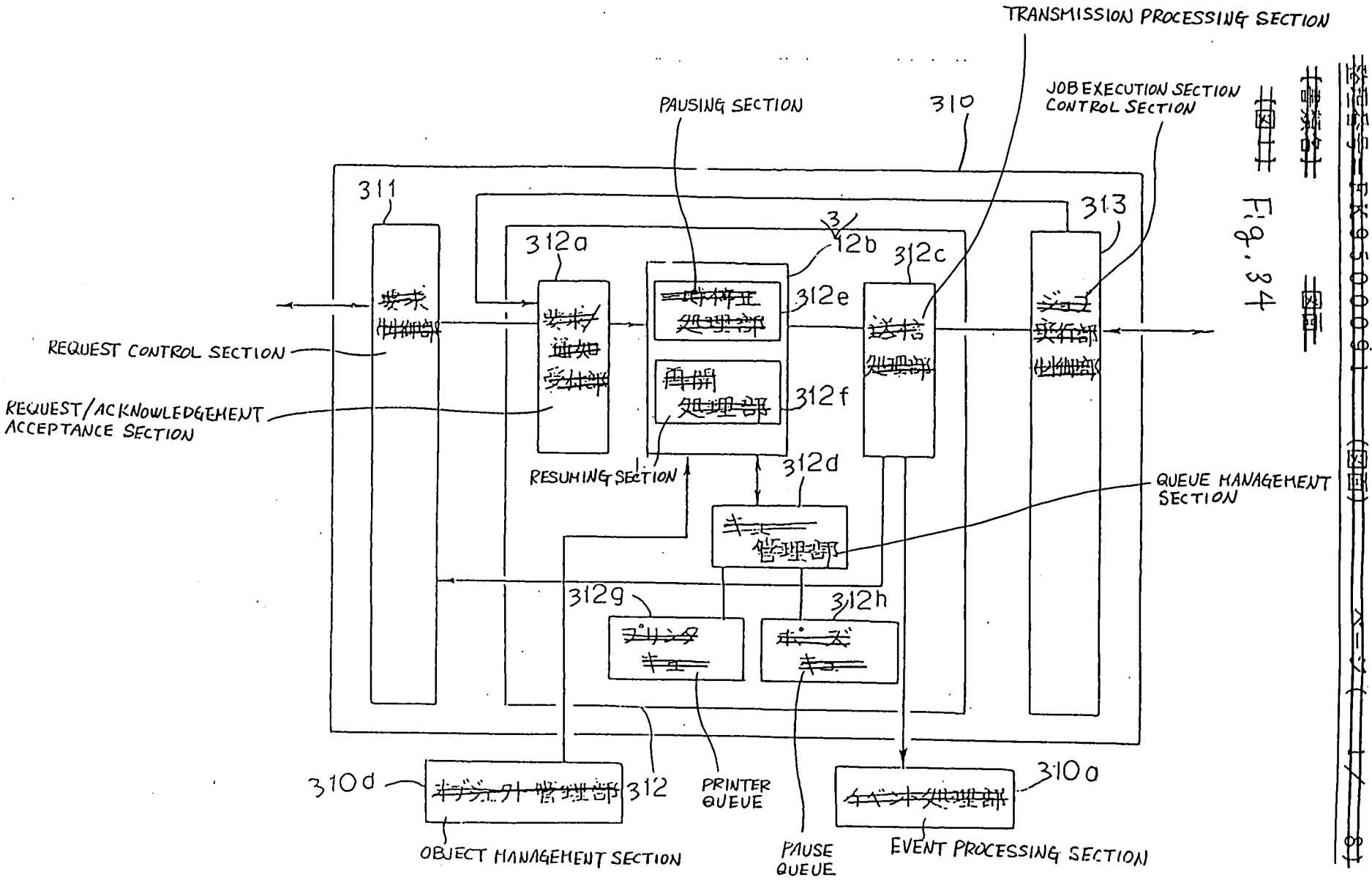
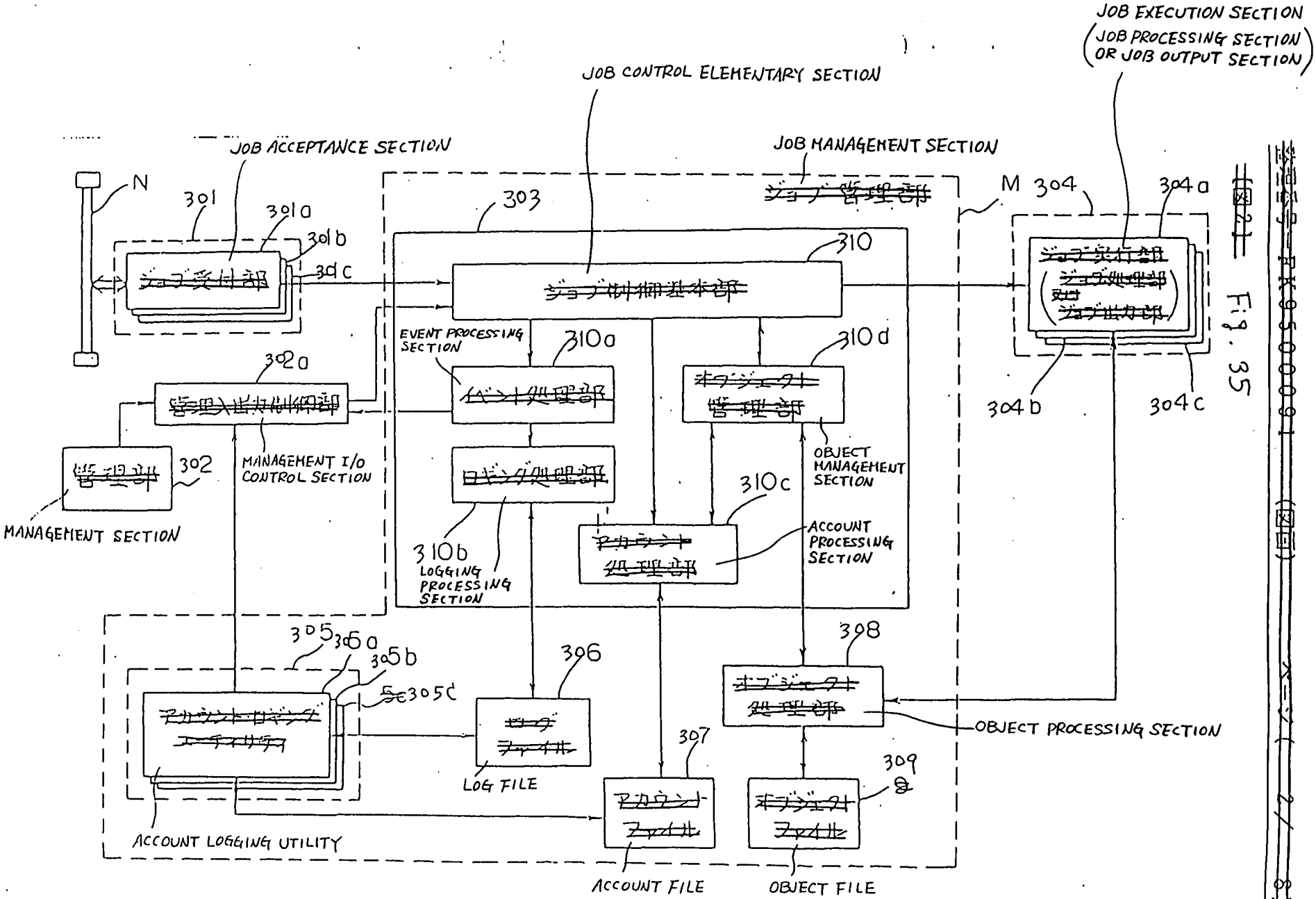


Fig. 34

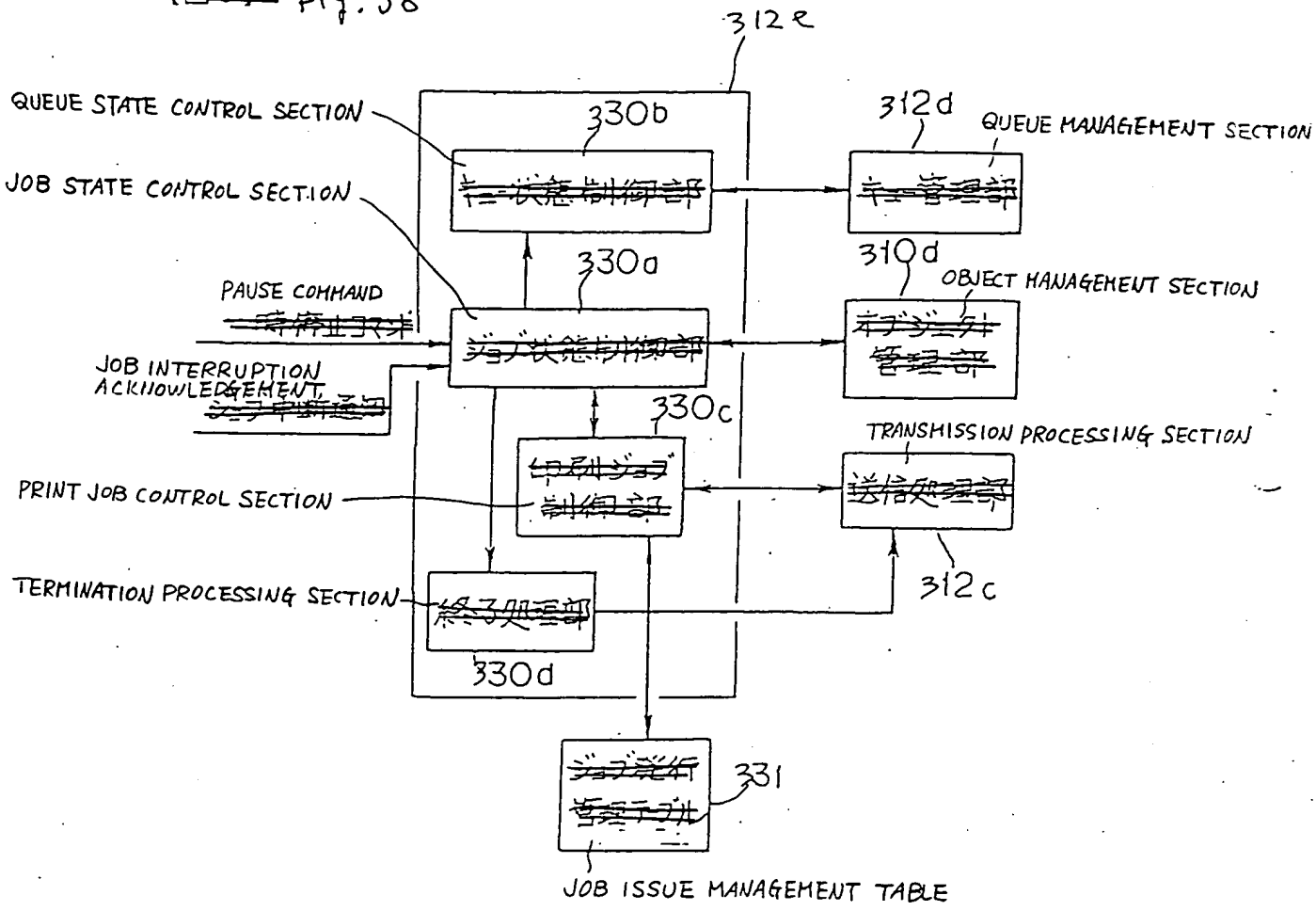
0900Z0 "02011960



第21図 Fig. 35

~~整理番号=FK950009-1 (図面) ページ(3/ 8)~~

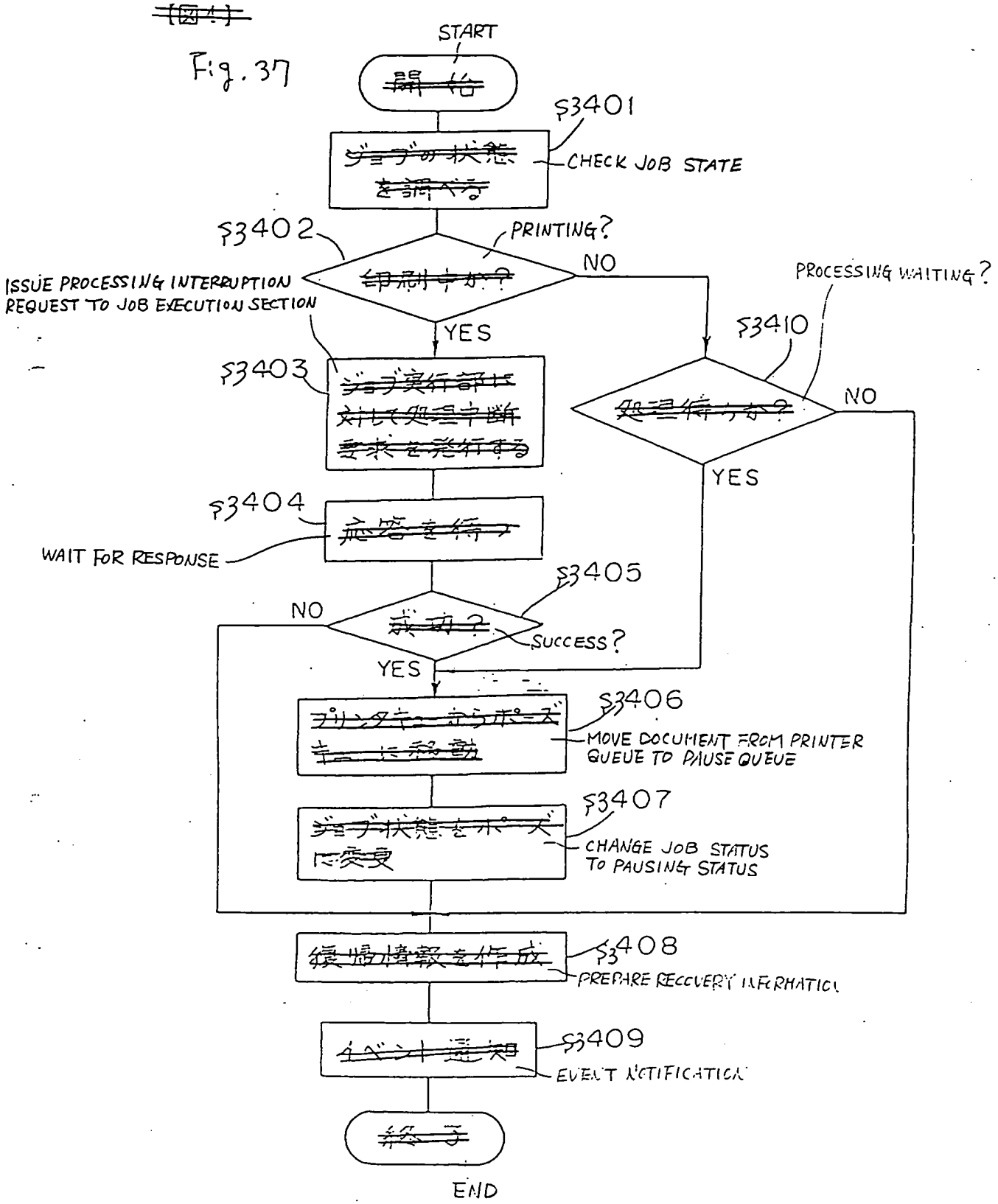
~~[図3]~~ Fig. 36



~~整理番号=FK950009-1 (図面) ページ(4/ 8)~~

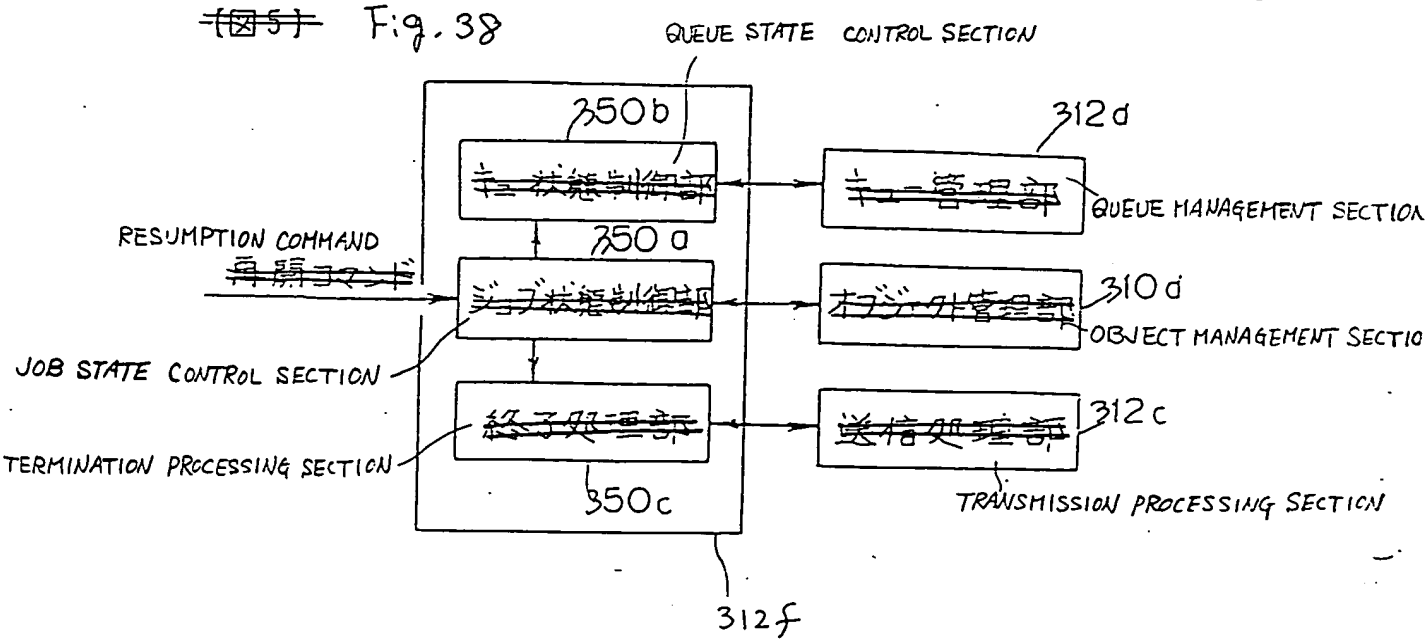
~~[図4]~~

Fig. 37



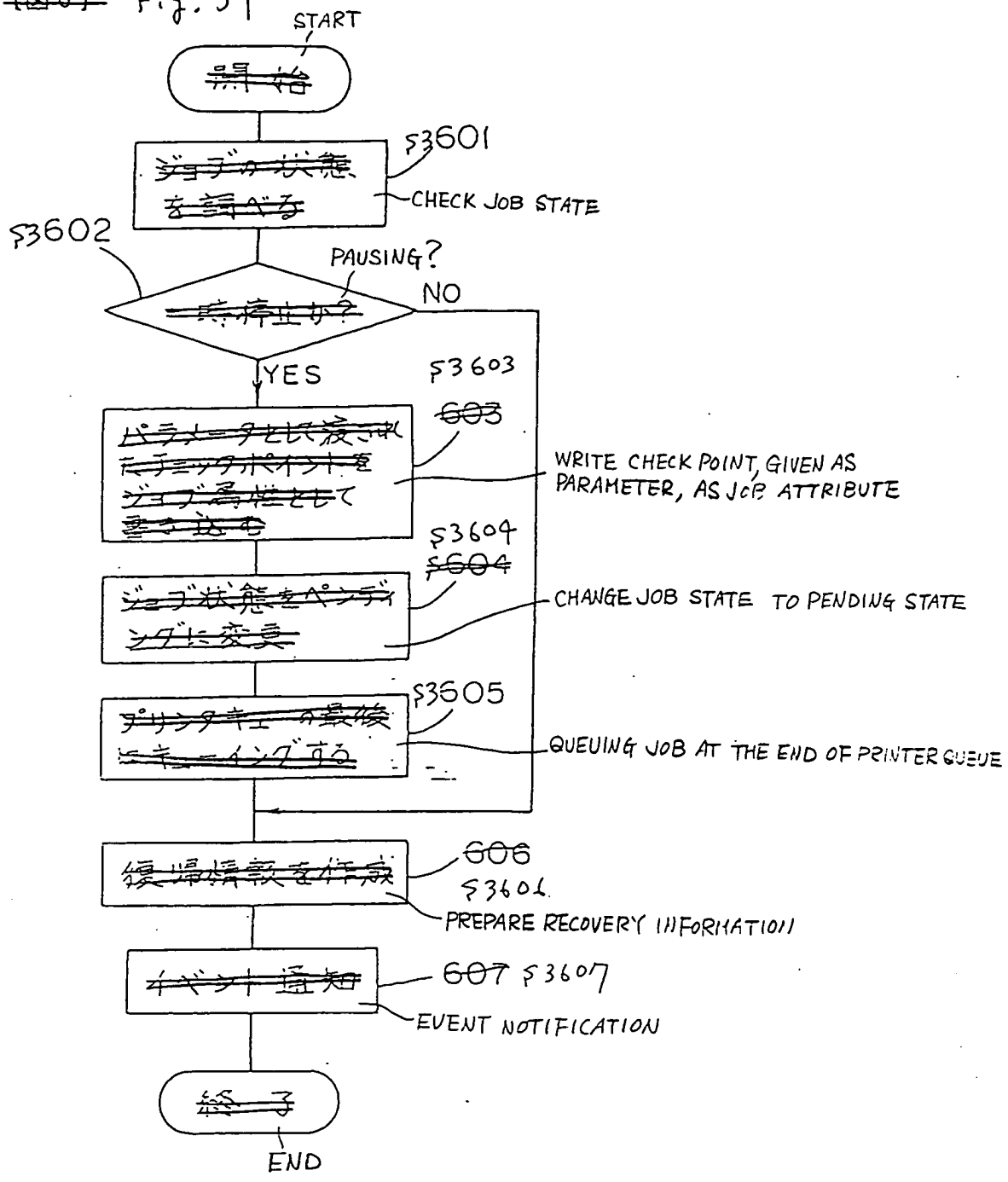
~~整理番号=FK950009-1 (図面) ページ(5/ 8)~~

~~(図5)~~ Fig. 38



~~整理番号=JK950009-1 (図面) ページ(6/ 8)~~

~~(図6)~~ Fig. 39



~~整理番号=PK9500091 (図面) ページ(7/ 8)~~

~~(図7)~~ ~~Fig.40~~

Fig.40a

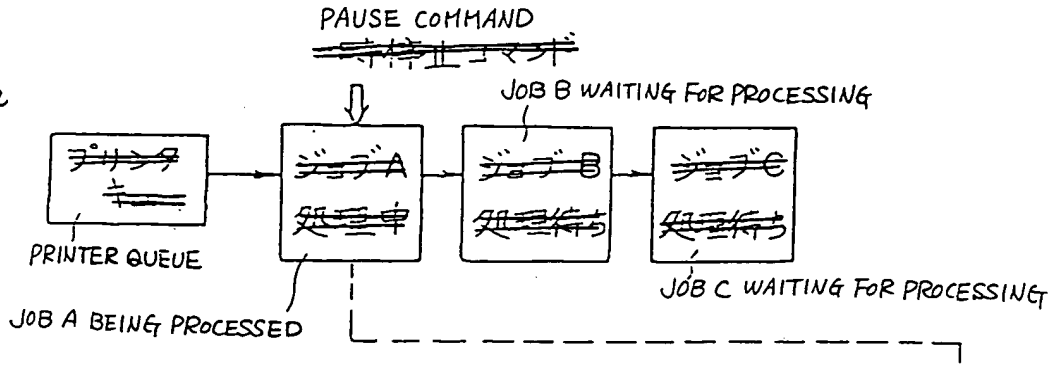


Fig.40b

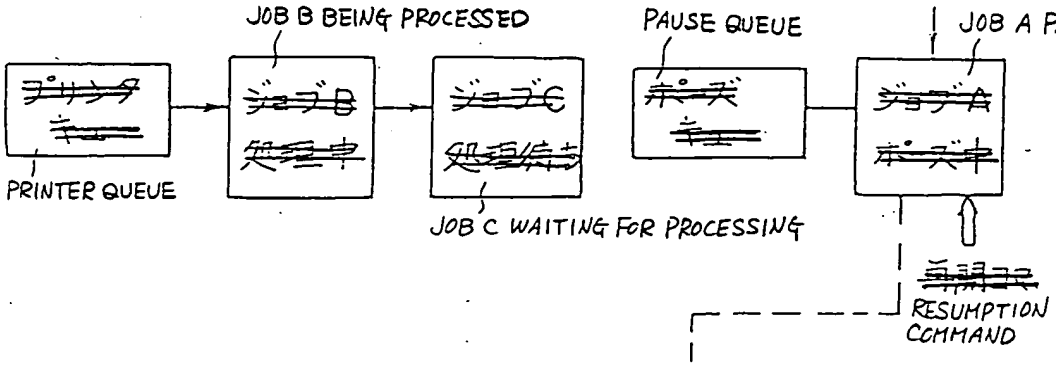
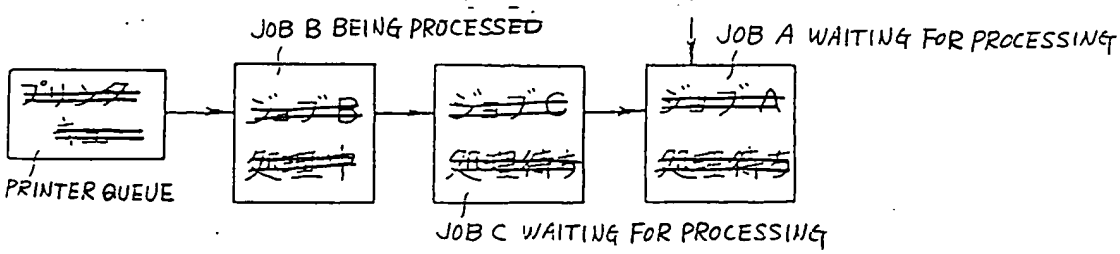


Fig.40c



6800620 "02047E60

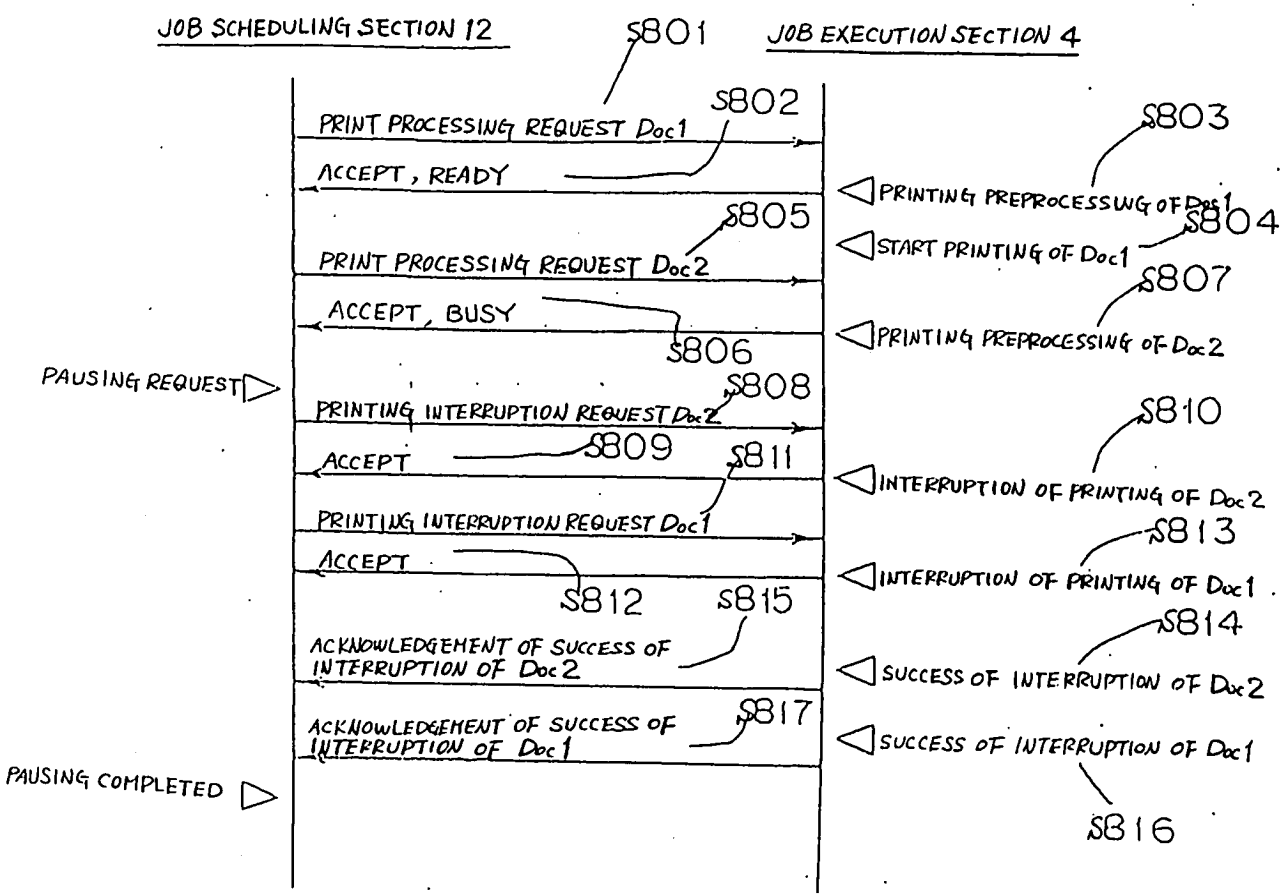


Fig. 41

DOCID: JP409500092A

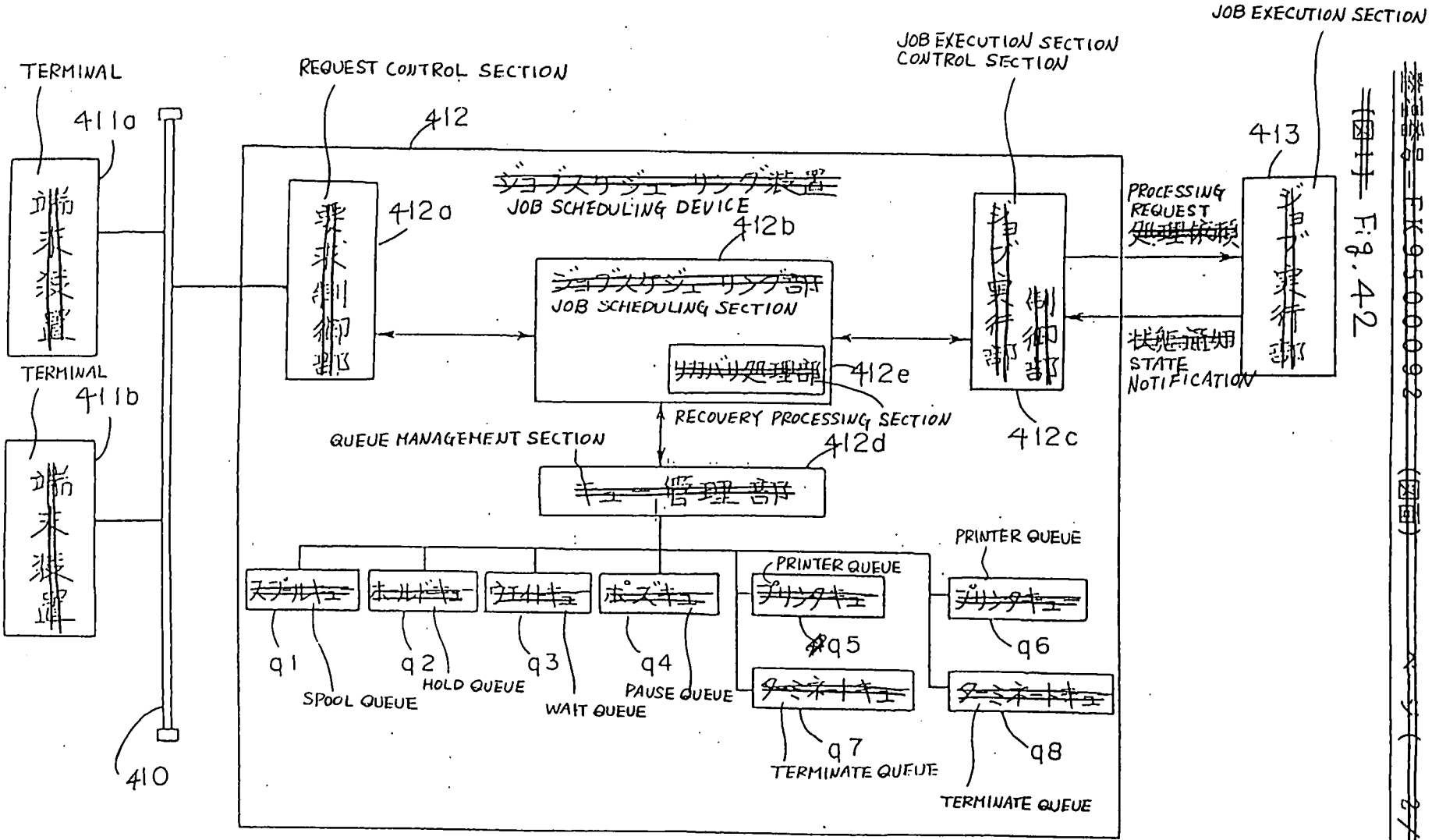
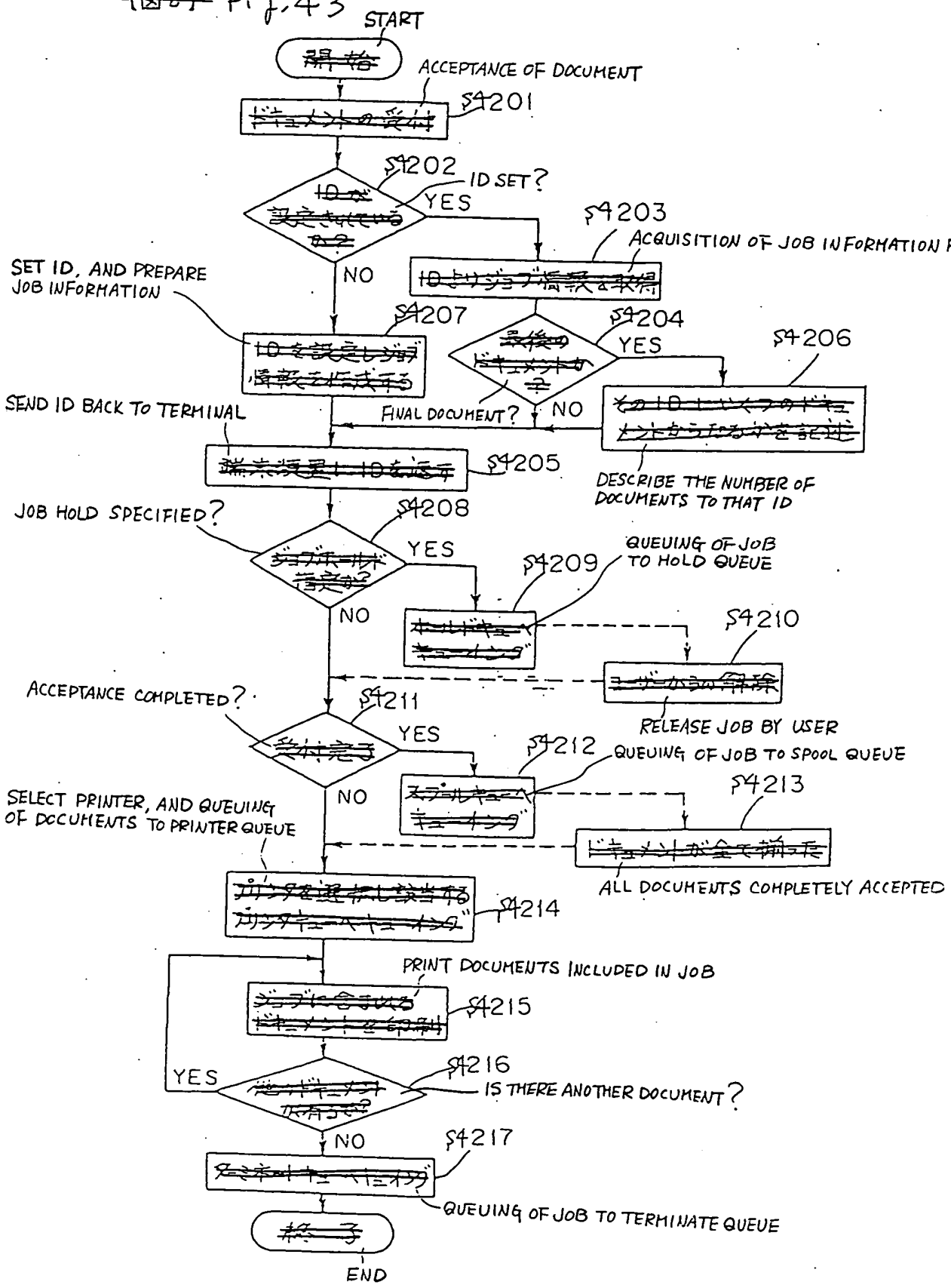


Fig. 42

~~整理番号=FK950008-2 (図面) 3/4~~

~~(図2)~~ Fig. 43



~~整理番号=EK9500092 (図面) ページ(4/ 4)~~

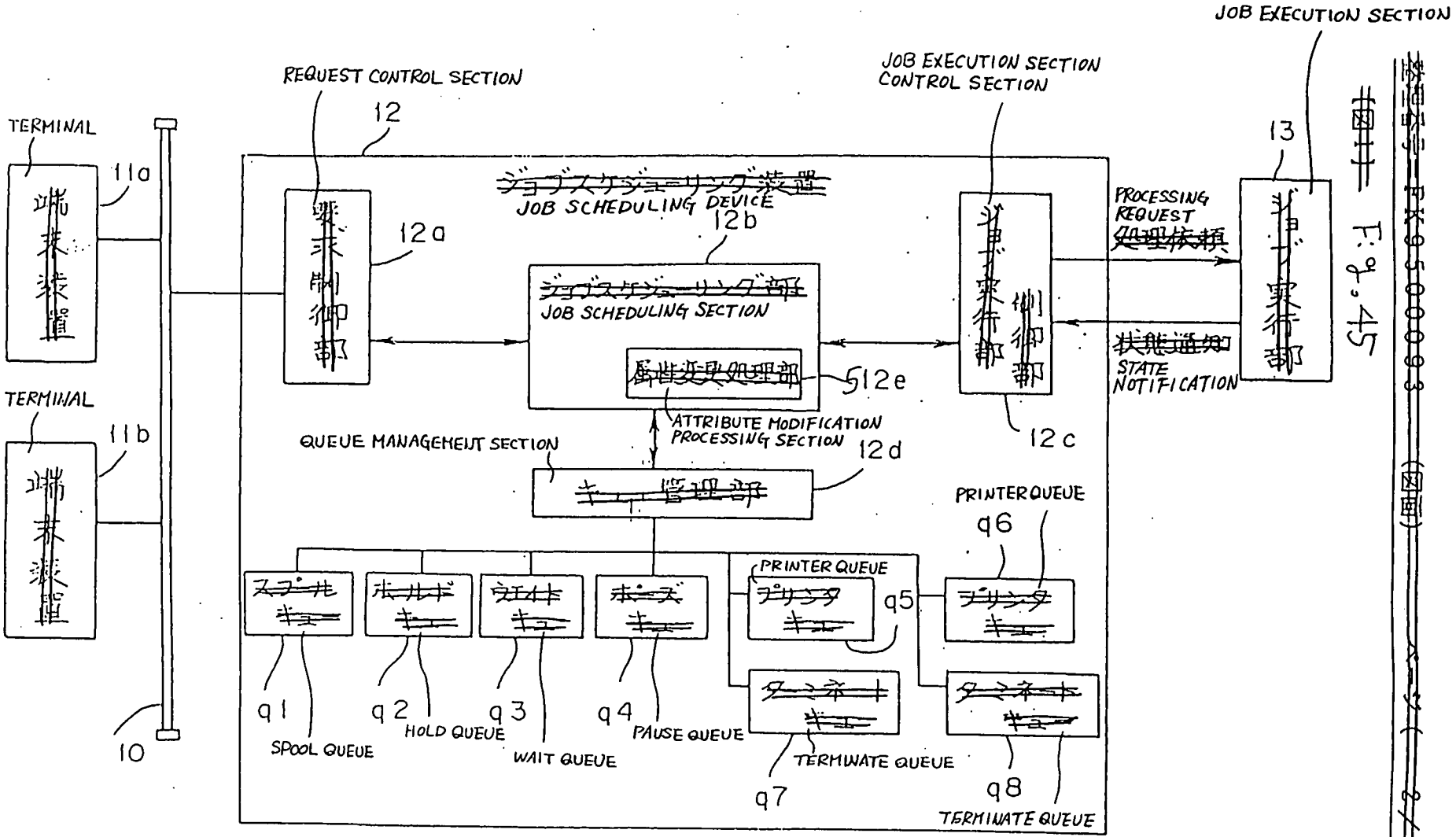
~~【図3】~~ Fig. 44

MEMBER	EXPLANATION OF MEMBER
jobID	IDENTIFICATION NUMBER OF JOB
docsecNum	DOCUMENT IDENTIFICATION NUMBER OF ONE-JOB MULTIDOCUMENT
currentDocNum	docsecNum FOR ISSUING PRINT REQUEST
status	JOB STATUS
prevQID	PREVIOUSLY RETAINED QUEUE ID
JobCopyCount	NUMBER OF COPIES
requestCounter	NUMBER OF TIMES FOR REQUEST FOR PRINTING DOCUMENT TO JOB EXECUTION SECTION
completeCounter	NUMBER OF TIMES PROCESSING OF DOCUMENT IS TERMINATED
abortedCounter	NUMBER OF TIMES DOCUMENT BEING PROCESSED IS ABORTED
collateFlag	FLAG SHOWING WHETHER OR NOT COLLATION IS EFFECTED
resumeFlag	FLAG SHOWING WHETHER OR NOT RESUMING IS EFFECTED
previousStaus	PREVIOUS STATUS
retry	RETRY COUNTER WHEN REJECTED
complete	FLAG SHOWING WHETHER OR NOT THE DOCUMENT IS FINAL DOCUMENT
convertID	ID OF REQUESTED CONVERTER
ohPagesComp	NUMBER OF PAGES JOB IS OUTPUT
ohDocPagesComp	NUMBER OF PAGES DOCUMENT IS OUTPUT
ohCurJobState	CURRENT JOB STATE
ohPrevJobState	PREVIOUS JOB STATE
ohJobStateReason	REASON FOR CHANGE OF CURRENT JOB STATE
ohAssignJE.I.D	ASSIGNED PRINTER ID
retryCounter	NUMBER OF RETRIES
processingFlag	FLAG SHOWING WHETHER OR NOT PRINTING IS BEING CARRIED OUT

430a

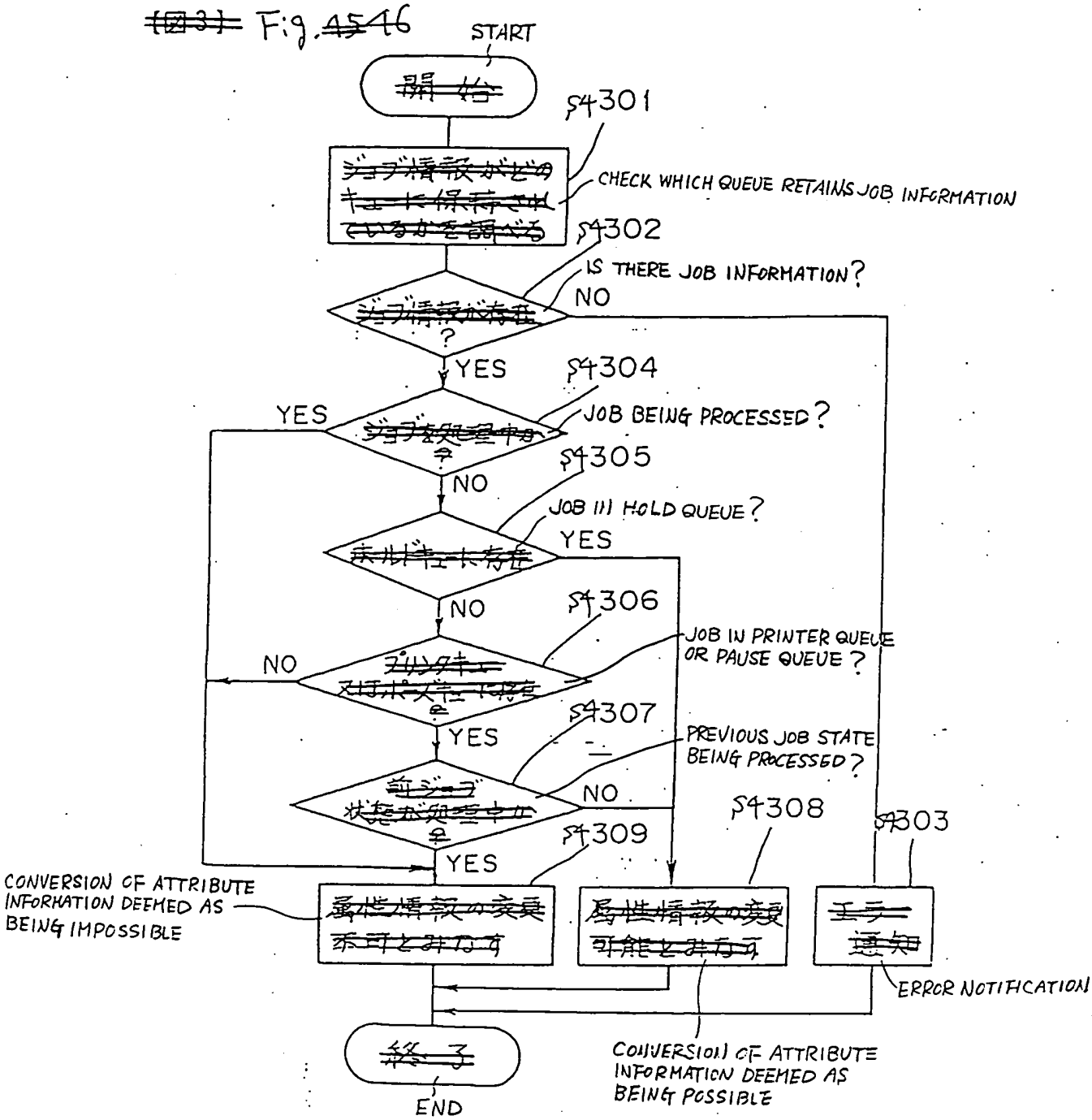
2000.12.20

6600620 "02049600



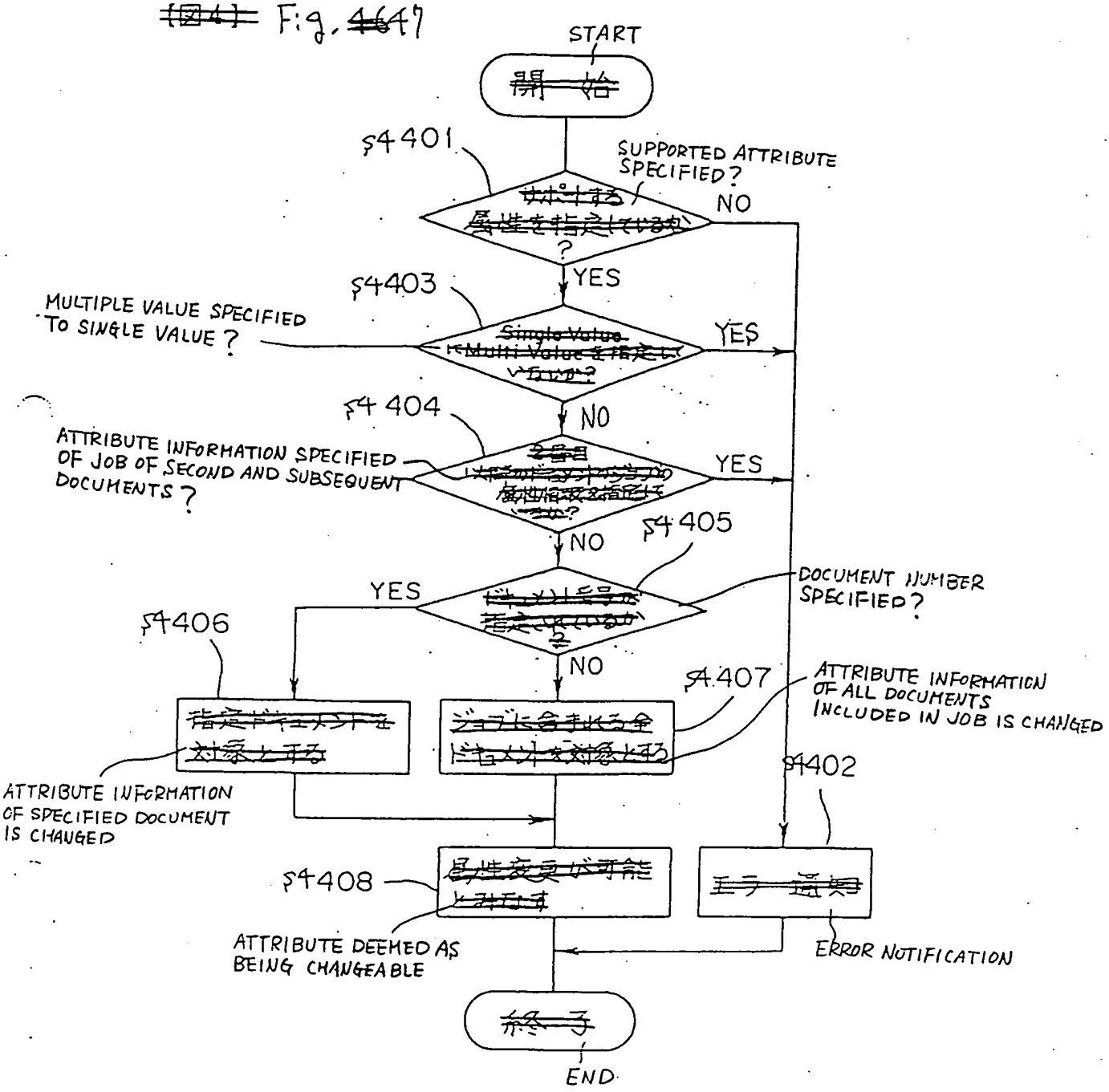
第三十四図 F:9.45

図31 Fig.4546


START
開始
S4301
CHECK WHICH QUEUE RETAINS JOB INFORMATION
S4302
IS THERE JOB INFORMATION?
NO
YES
S4304
JOB BEING PROCESSED?
YES
NO
S4305
JOB IN HOLD QUEUE?
YES
NO
S4306
JOB IN PRINTER QUEUE OR PAUSE QUEUE?
NO
YES
S4307
PREVIOUS JOB STATE BEING PROCESSED?
NO
YES
S4309
S4308
S4303
CONVERSION OF ATTRIBUTE INFORMATION DEEMED AS BEING IMPOSSIBLE
ERROR NOTIFICATION
終了
END
CONVERSION OF ATTRIBUTE INFORMATION DEEMED AS BEING POSSIBLE

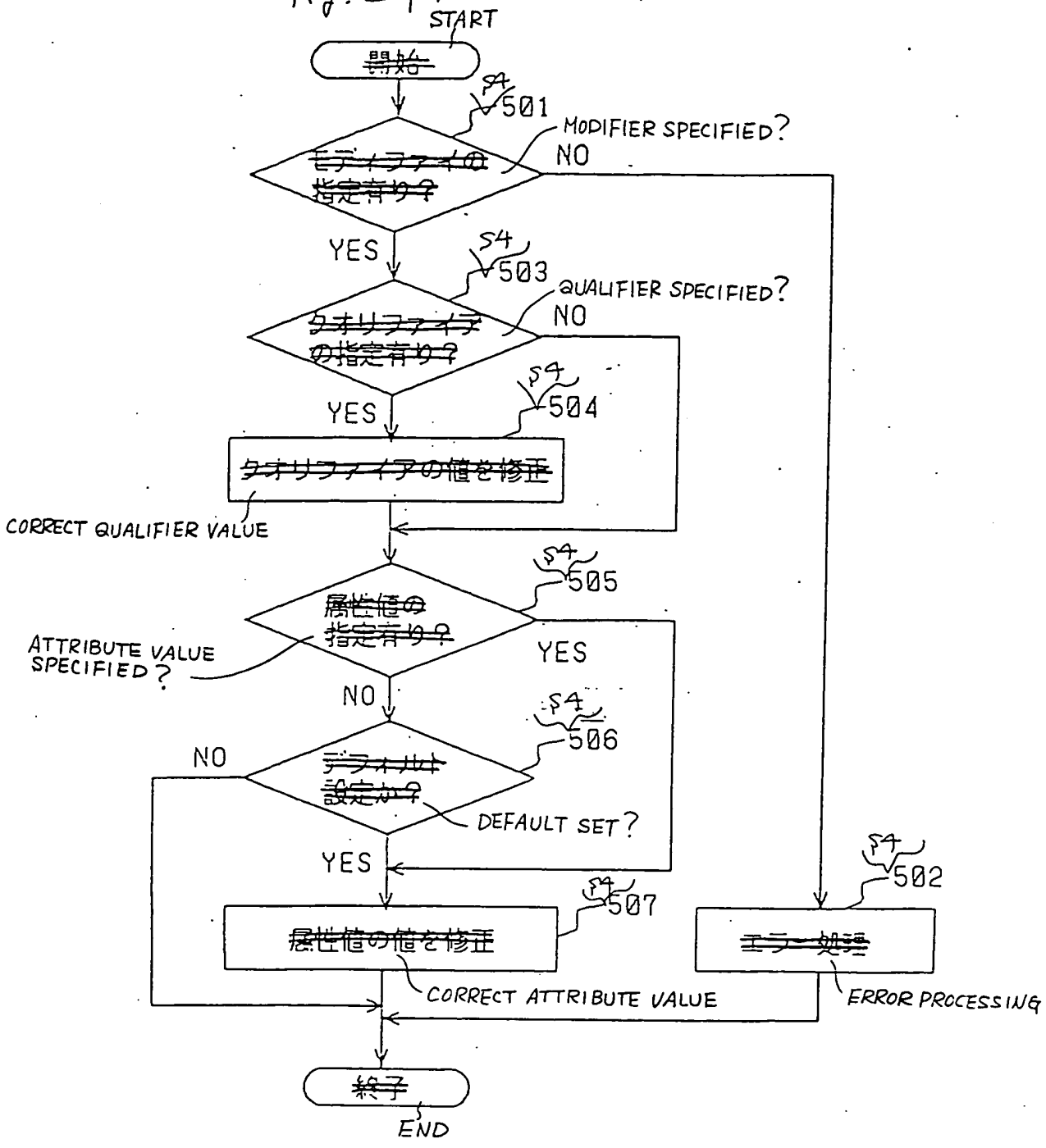
~~整理番号=FK950093 (図面) ページ(5/ 9)~~

~~[図4]~~ Fig. ~~46~~47

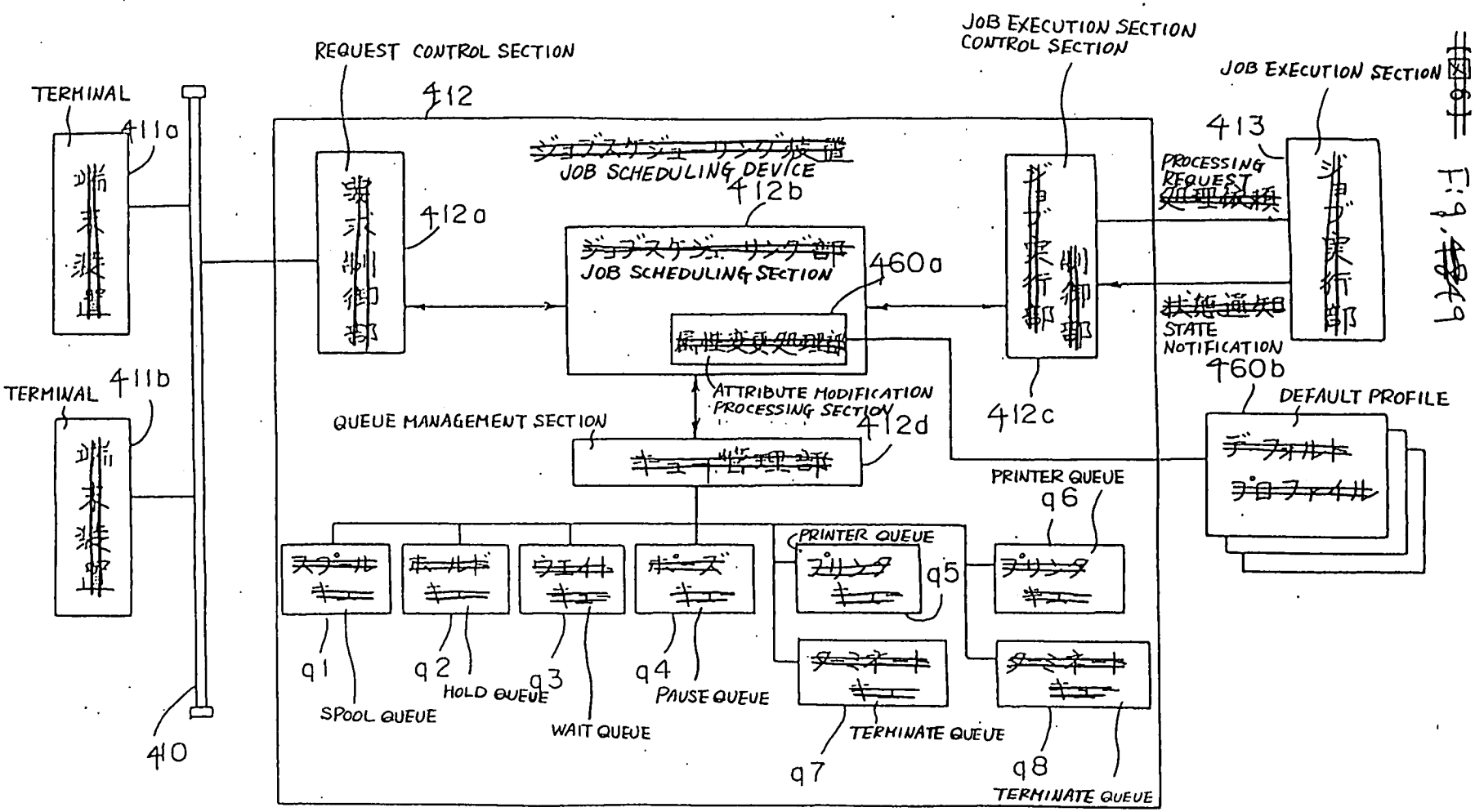


~~整理番号 FK950093 (図面) ページ (6 / 9)~~

~~(図5)~~ Fig. ~~4~~ 48



DOCUMENT CONTROL



第6図 Fig. 6

~~整理番号=FK950093 (図面) ページ(8/ 9)~~

~~[図7] Fig. 49b~~

Fig. 50a

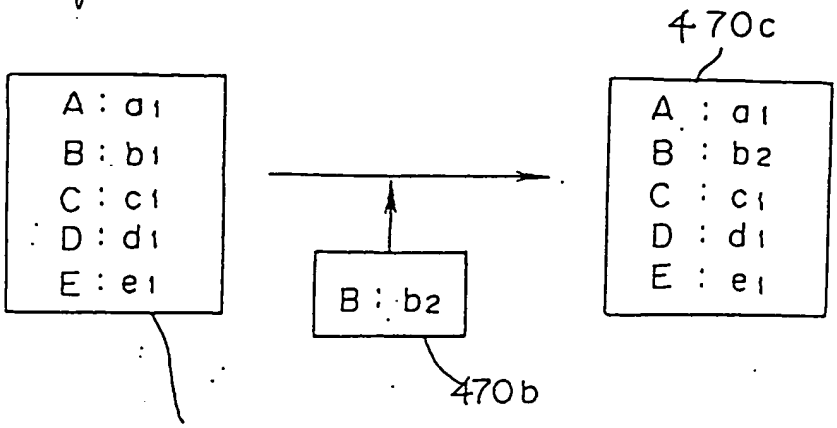
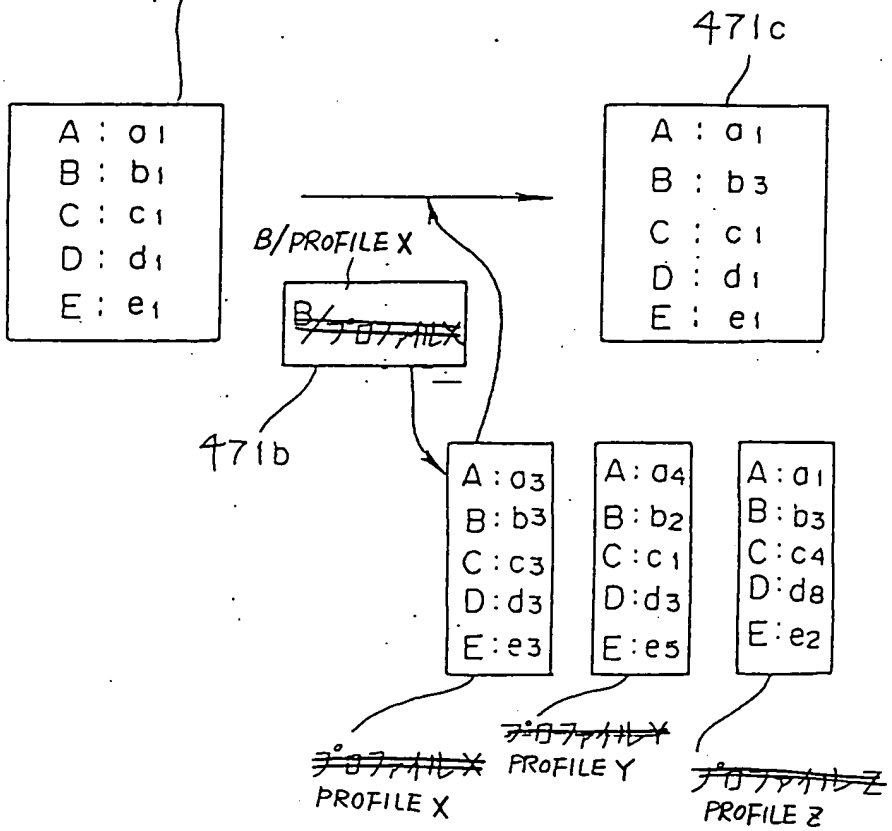
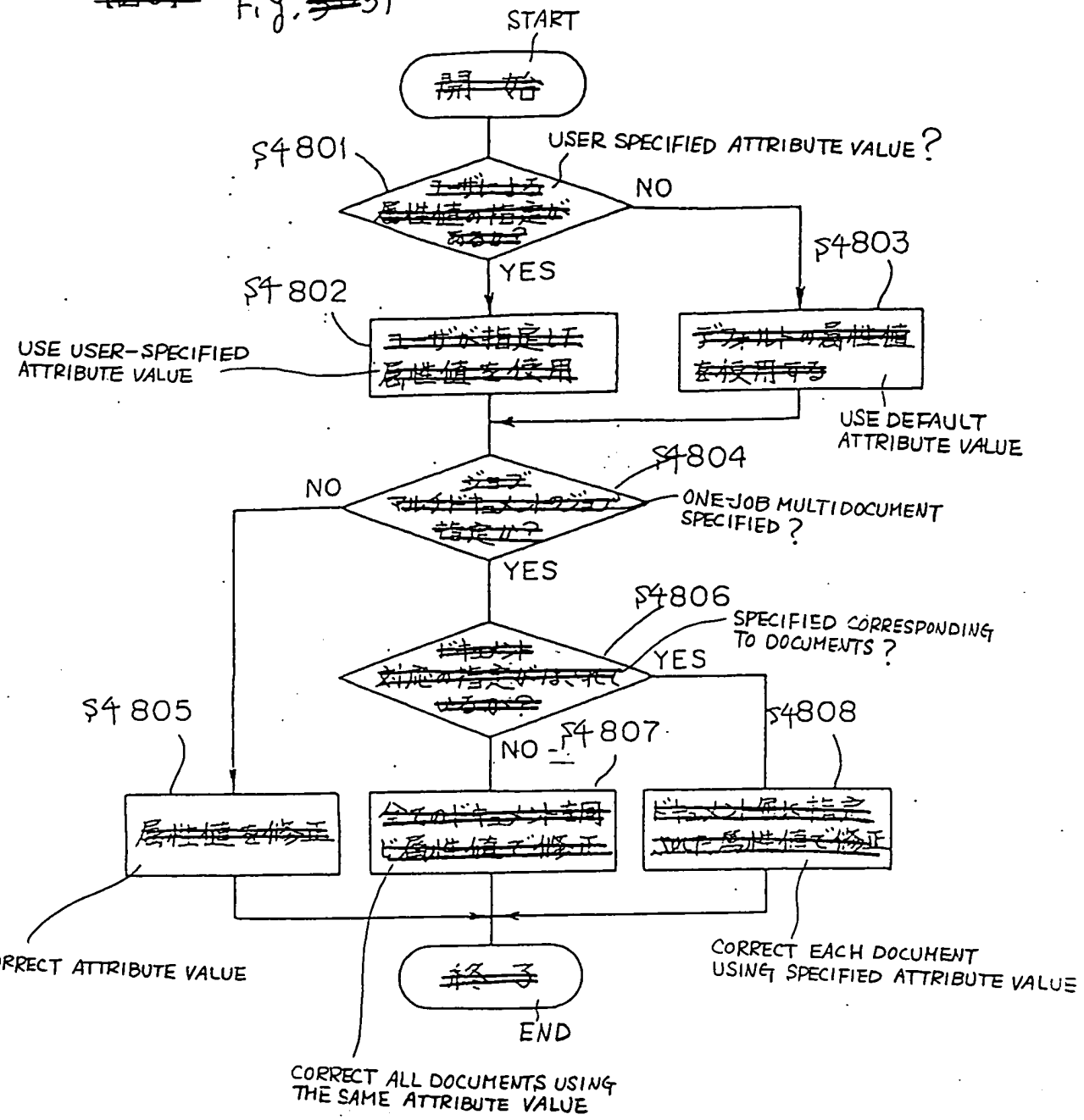


Fig. 50b



~~整理番号=FK950093 (図面) ページ(9/ 9)~~

~~(図8)~~ Fig. ~~9~~ 51